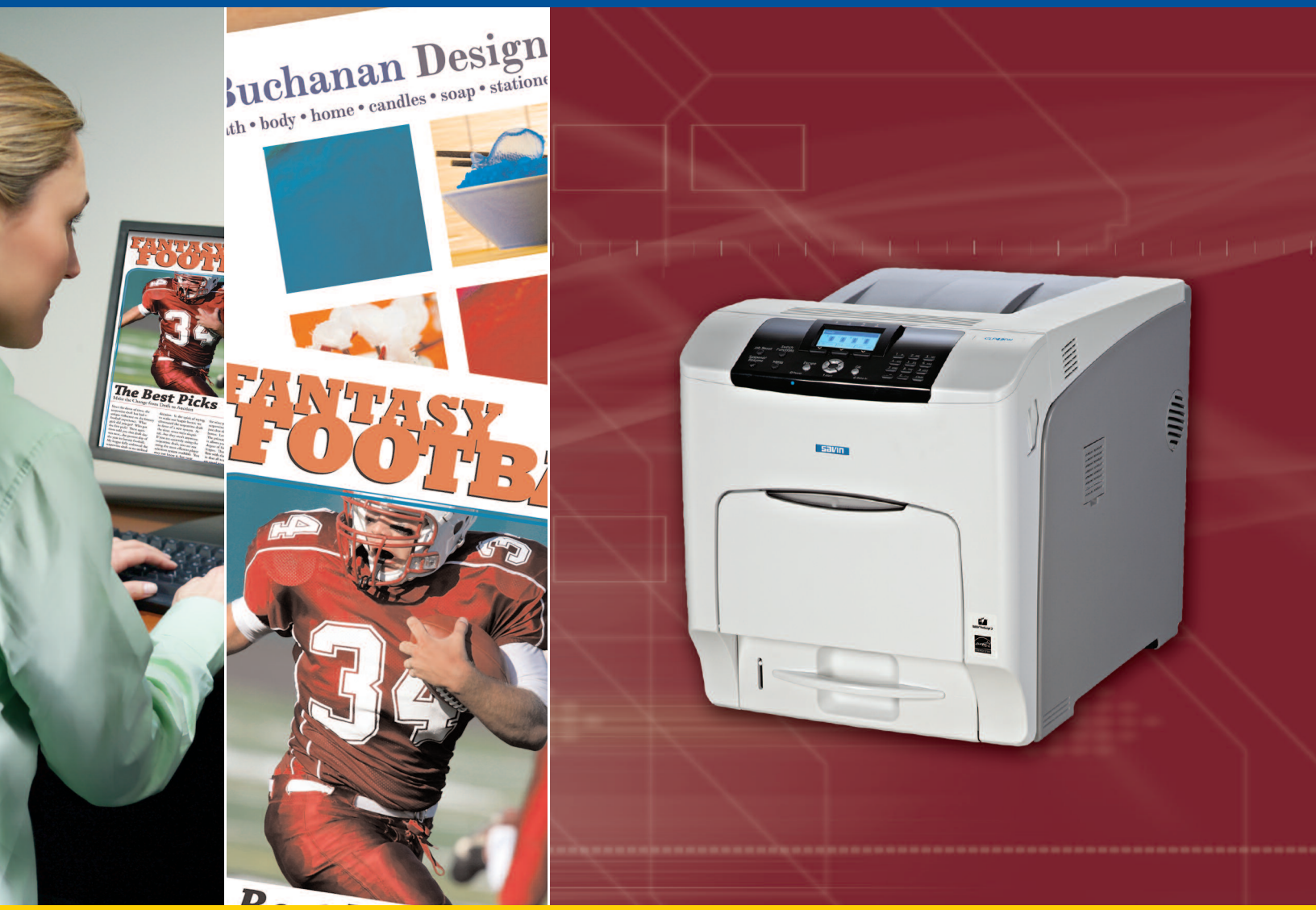
savin®

CLP37DN/CLP42DN

Color Laser Printer

POWER > CONTROL > VALUE > PRINT > COLOR >



An extraordinary printer for all your ordinary printing needs.

Sales Information Guide

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Savin CLP37DN/CLP42DN Sales Information Guide

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Savin CLP37DN/CLP42DN

ABOUT THIS SALES INFORMATION GUIDE

This Sales Information Guide is designed to provide all Savin sales channels with the marketing knowledge and technical information needed to successfully place Savin's new CLP37DN and CLP42DN Color Laser Printers.

WHAT'S IN THIS SALES INFORMATION GUIDE?

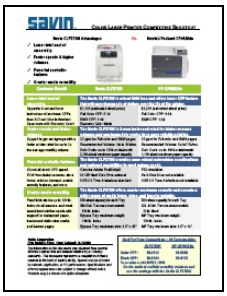
Topics covered in this document include:

- Product Concept & Positioning
- Target Markets & Applications
- Marketing Strategies & Prospecting Tips
- Hardware Overview
- Core Technology Review
- System Specifications

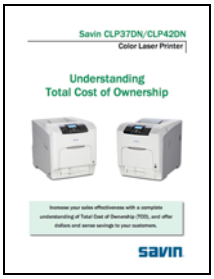
WHAT CAN BE FOUND ELSEWHERE?

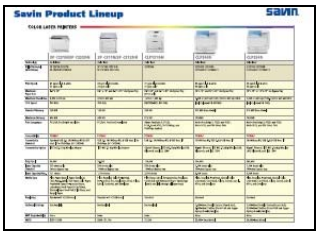
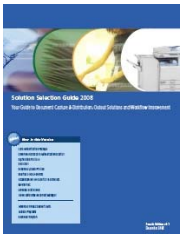
Several pages and tables within this Guide are broken out as separate files for quick reference. Savin is also making available the following collateral materials available to get your Savin CLP37DN/CLP42DN Color Laser Printer sales off to a great start:

Item	Description/Use	Where to find it
Product Brochure 	4-page brochure used to provide a marketing overview and detailed specifications of the product. ■ Customer Sales Tool/Leave Behind. ■ Show Room use. ■ Trade Shows & Open Houses.	■ InfoCenter ■ Company Website ■ Savin Connects
Competitive Matrix 	Side-by-specification comparisons only of the top identified competitors for quick reference.	■ InfoCenter ■ Savin Connects

Item	Description/Use	Where to find it
Competitive Guide 	Internal sales tool containing side-by-side specification comparisons against several top competitors with highlights of Savin advantages to raise in your discussions with customers. ■ Brush up on your competitive advantages before your next call!	■ InfoCenter ■ Savin Connects
Competitive Shootouts 	1-page versions featuring top competitive advantages of the Savin CLP37DN or CLP42DN against identified competitors ■ Print and take along on your sales calls.	■ InfoCenter ■ Savin Connects
What's New & Different? Tables 	Quickly see where Savin has upgraded or changed system capabilities and specifications versus the model these units are replacing.	■ InfoCenter ■ Savin Connects ■ Sales Information Guide
Product Reference Guide 	Internal sales tool that summarizes product highlights, specifications, supplies and consumables, and product ordering information. ■ Print this out and take along on your sales calls.	■ InfoCenter ■ Savin Connects

Savin CLP37DN/CLP42DN

Item	Description/Use	Where to find it
Frequently Asked Questions 	Quickly find the answers to common questions regarding product functions, yields, and specifications.	■ InfoCenter ■ Savin Connects
Total Cost of Ownership 	Learn how to calculate CPP factors and determine total cost of ownership. ■ CPP calculations prepared against several key competitors. ■ Contains a worksheet template to conduct CPP/TCO exercises with customers.	■ InfoCenter ■ Savin Connects
Product Launch Presentation 	Internal training PowerPoint presentation for Savin dealer sales managers and branch managers to conduct kickoff meetings to introduce product to the field. ■ Contains detailed positioning, technology, and marketing strategy information.	■ InfoCenter ■ Savin Connects
Printer, MFP & Software Solutions Product Line Presentation 	Customer Sales Tool demonstrates depth and breadth of Savin product lines across several product families to prospective customers. ■ Use to train new sales reps on the nuances of the product line.	■ InfoCenter ■ Savin Connects
Product Operator Manuals 	Provided with product for customer use in system installation, job programming, troubleshooting, and maintenance tasks. Excellent for sales reps to learn details of product capabilities, job programming steps, and initial device/network configuration.	■ InfoCenter ■ Company Website

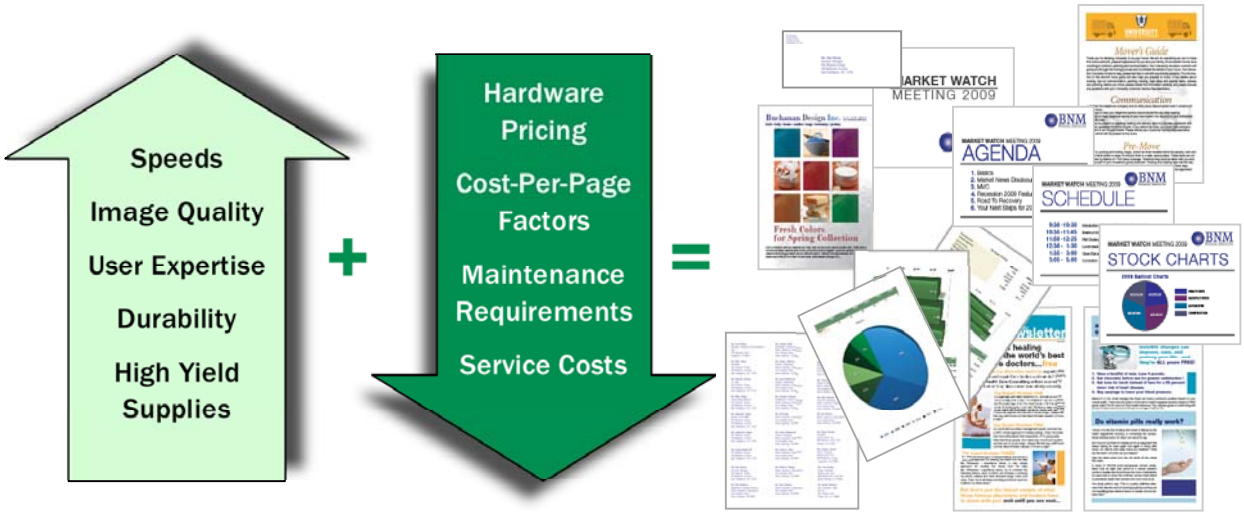
Item	Description/Use	Where to find it
Savin Printer/MFP Line Card 	Internal and external sales tool that displays the primary specifications, capabilities, and MSRP of the current Savin color and black & white printer, MFP, and scanner product lines.	■ InfoCenter ■ Savin Connects
Hi- & Low-Resolution Product Images 	Download high and low resolution product images for use in local print and web-based marketing materials.	■ InfoCenter
Solution Selection Guide 	Provides a detailed review of the bundled and optional software utilities and data conversion filters for use with all Savin devices. ■ Matrix charts identify supported solutions and utilities for each model.	■ InfoCenter
Security Solutions Brochure 	Provides a detailed review of the system access and data protection capabilities supported by all Savin devices. ■ Matrix charts identify supported data and device security features for each model.	■ InfoCenter
Product Certification Module & Quiz 	A self-paced e-learning module that reviews product positioning, hardware options, and capabilities. Completion of a 20-question quiz earns your certification on these models.	■ Savin Connects Training Portal

INTRODUCTION

Evolving In Step With Customer Needs

Technology advancements and customer printing applications continue to grow more sophisticated at an accelerated pace. To be successful, our solutions must evolve in lockstep with customer needs or risk being replaced by more modern, cost efficient, and user-friendly competitive devices.

As desktop color laser printers have become faster, more powerful, capable of superior image quality, more robust, and more economical, more volume is migrating to these devices. This allows even the smallest businesses and workgroups to take advantage of *business building color* and produce more professional marketing materials in-house.



Therefore, the target market for more robust mid-volume color laser printers has expanded, and with them your sales opportunities have expanded as well – down to small workgroups with as few as five (5) users.

In the past, the cost threshold for a mid-volume color laser printer usually demanded placement into larger workgroups whose population, volumes, and applications justified the need for speed (the white area encircled by the dotted line). The new Savin CLP37DN/CLP42DN pushes the boundaries of suitable prospects out to smaller offices and workgroups with much lower head counts to encompass the entire yellow area in the Target Environment graphic.

Placing a 37-ppm or 42-ppm solution into an environment this small was unheard of just a few years ago. But the target market has expanded because in 2010 there are more sophisticated end-users performing more complex publishing tasks in greater volumes inside smaller offices. This trend, combined with the increasing affordability of more robust color laser printers makes it easier for smaller customers to justify the purchase of a Savin CLP37DN/CLP42DN.

The point to be learned here is that volumes and applications are no longer an accurate indication of head count, and vice-versa. Falling hardware prices, expanded media choices, superior image quality, and lower cost-per-page factors have smaller businesses executing more jobs in house. Today it's quite possible to have a small consulting firm, corporate training team, or marketing department generate volumes greater than an entire sales department with many times the number of employees. So your approach to identifying suitable Savin CLP37DN/CLP42DN prospects must evolve as well.

The Market Opportunity: A Silver Lining

Everyone acknowledges the impact of the recession on technology sales. Even as the global recovery takes hold many companies continue to delay spending. Overall growth will come from less developed regions of the world. In North America the pain remains acute. With a highly developed business infrastructure already in place, the United States' economic recovery will lag behind other nations' because modernizing is not as urgent here.

Going forward, industry analyst IDC forecasts an 11% annual drop in U.S. Color Laser Printer sales for the period of 2008 – 2013. A market that placed almost 1,000,000 units in 2008 will see a little more than half that activity by 2013.

U.S. Color Laser Printer Shipment Forecast	2008	2009	2010	2011	2012	2013	2008 - 13 CAGR
	930,017	669,880	579,936	554,862	530,052	511,624	(11.3%)

Source: IDC, 2009

A look back at recent performance by brand in the U.S. for 2006 – 2008 shows the Ricoh Family Group firmly entrenched in the #5 position despite a shrinking pie. During this period RFG-branded color laser printer sales have surpassed those of Lexmark, Konica Minolta, and OKI. You can thank the performance of systems like the CLP26DN, the CLP27DN/CLP31DN, the SP C400DN, and the CLP131DN for raising the bar for image quality, reliability, and total cost of ownership, and with them, Savin and RFG market acceptance.

U.S. Color Laser Printer Shipments & Market Share by Vendor; 2006 - 2008

Vendor	2006		2007		2008	
	Shipments	% Share	Shipments	% Share	Shipments	% Share
HP	537,032	52%	550,290	56%	512,890	55%
Dell	130,992	13%	104,884	11%	106,536	11%
Samsung	54,750	5%	70,886	7%	96,584	10%
Xerox	91,284	9%	87,545	9%	88,013	9%
Ricoh Family Group	42,768	4%	36,570	4%	31,631	3%
Lexmark	42,223	4%	37,102	4%	25,978	3%
Konica Minolta	48,803	5%	26,434	3%	21,276	2%
OKI	62,864	6%	33,355	3%	19,543	2%
Brother	5,056	0%	18,288	2%	17,770	2%
Kyocera Mita	6,961	1%	9,515	1%	6,537	1%
Canon	-	0%	890	0%	1,261	0%
InfoPrint	-	0%	1,073	0%	1,065	0%
Panasonic	2,422	0%	1,664	0%	324	0%
Others	3,416	0%	1,161	0%	609	0%
Total	**1,028,571**	**100%**	**979,657**	**100%**	**930,017**	**100%**
% Growth			-5%		-5%	

Source: IDC, 2009

In addition to general belt tightening, part of the reason for the anticipated drop in demand can be attributed to the increased durability and longevity of today's more solidly built systems, as well as customers' desire to repair and maintain existing hardware to maximize their initial investment. Even with the loss in raw numbers, the U.S. market will still find room to absorb more than 500,000 color laser printers per year for the next four years. Some of that will come from upgrading the nearly 100,000 Ricoh Family Group printers sold during 2006 – 2008 that will reach end of lease/end of life during the period.

So if the market is shrinking and buyers are holding off purchases, where is the silver lining?

1. Market research indicates that when customers begin to buy again they will be more likely to spend a little more up front to purchase a higher quality solution than a quick fix. Value and long-term TCO will become more important than price.

2. A look at worldwide color laser printer demand by speed band shows healthy growth curves for the 11 – 20-ppm, 21 – 30-ppm, and 31 – 44-ppm market segments through 2013 (figures by region not available) as customers move up market.

3. The falling prices of 31 – 44-ppm devices will make them more attractive to smaller offices with growing volumes and more complex publishing applications. Customers that previously considered an 11 – 20-ppm printer may look at the 37-ppm CLP37DN. Customers that previously investigated 21 – 30-ppm solutions may be able to justify the 42-ppm CLP42DN.

Worldwide Shipments by Printer Speed	2008	2009	2010	2011	2012	2013	08 - 13 CAGR
1 – 10-ppm	2,079,259	1,473,199	1,530,763	1,536,821	1,508,242	1,357,431	(8.2%)
11 – 20-ppm	896,054	762,601	918,203	1,187,064	1,481,736	1,809,843	15.1%
21 – 30-ppm	902,788	776,751	867,210	1,042,568	1,262,196	1,513,300	10.9%
31 – 44-ppm	135,159	120,443	147,612	177,679	216,747	265,139	14.4%
45+-ppm	201	2,556	9,343	14,699	27,341	47,539	198.4%
Total	4,013,461	3,135,550	3,473,131	3,958,831	4,496,262	4,993,252	4.5%

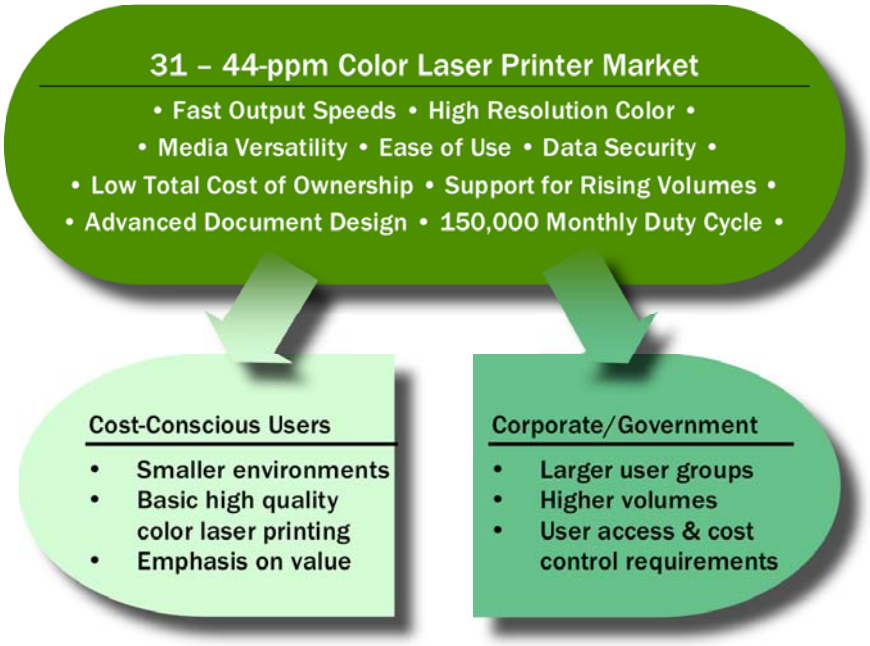
Source: IDC, 2009

So in spite of a contracting market, the combination of a more versatile printer, increased customer sophistication, falling prices, and rising volumes will give rise to a larger pool of prospects for solutions like the Savin CLP37DN/CLP42DN.

A Changing Market Landscape

As these more robust printers are finding their way into smaller environments, it appears that the mid-volume color laser printer market is evolving into two sub-classes.

On one side are cost-conscious customers seeking fast, easy to use, high quality full-color output at minimal cost to keep pace with growing in-house volumes and applications. These are the small businesses and workgroups that may have previously thought a solution of this caliber was beyond their reach. They have cost, image quality, and performance expectations similar to corporate users, but their small business/informal environments result in little need for solutions with enhanced security.


31 – 44-ppm Color Laser Printer Market
• Fast Output Speeds • High Resolution Color •
• Media Versatility • Ease of Use • Data Security •
• Low Total Cost of Ownership • Support for Rising Volumes •
• Advanced Document Design • 150,000 Monthly Duty Cycle •
Cost-Conscious Users
• Smaller environments
• Basic high quality color laser printing
• Emphasis on value
Corporate/Government
• Larger user groups
• Higher volumes
• User access & cost control requirements

At the other end of the spectrum are the corporate enterprise-class and government or major account customers with larger user populations that also require fast, easy to use, high quality full-color output at minimal cost, but with a high degree of control over device access and output for security, compliance, and/or cost control purposes.

The common denominators among this entire pool of prospects remain fast, easy to use, high quality, full-color output at minimal cost. Savin intends to meet the evolving needs of both customer types head-on with the introduction of a next-generation mid-volume color laser printer mainframe optimized for each environment.

The View from the Street

How does Savin know that we are reading the market signs correctly? How can we be sure that this strategy is one that customers will embrace? Because we asked.

After the launch of the CLP131DN in 2008 Savin took a pause in color laser printer product development. Product engineers and executives from Japan joined Ricoh Family Group marketing personnel on a national U.S tour of mid-volume color laser printer customer locations.

Accounts visited ranged from well-known national/major accounts to government customers to down-the-street commercial businesses. The goal: find out how satisfied these customers were with product performance, image quality, and ease of use. What did they like? Where could Savin improve its next-generation offering that would become the new CLP37DN/CLP42DN Color Laser Printer?

Overall, most customers were pleased with system performance, media support, output quality, the ease of replacing supplies, and the low total cost of ownership offered by Savin color laser printers.

Areas that smaller customers cited for improvement included:

- **More compact size.** While this was one request Savin could not physically accommodate and still maintain desired speeds, additional media versatility would be built into the new system without increasing footprint. Also, when given the choice of slower print speeds in exchange for a smaller footprint, customers preferred to keep the existing larger footprint.
- **Minimize the cost of color.** In addition to maintaining the low CPP factors of its predecessors, the new printer would offer an intelligent Economy Color Mode to produce light color prints for about the half cost of a full-color page.
- **Increase media handling.** Allow small offices to produce more volume in-house by providing systems that support heavier media. The new printers would offer support for the heaviest stocks and widest range of special media types ever in a Savin desktop color laser printer.

Areas that major/global account customers cited for improvement included:

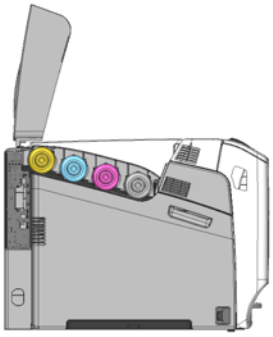
- **Ease of entering user data** such as IDs and passwords when accessing Locked Print Mode, and/or selecting stored files for reprinting at the control panel. Many large accounts have standardized on the Locked Print function, but some end users found it difficult to enter their data. Others found it clumsy to select documents stored on Hard Disk Drives for reprinting. The solution: a user-friendly 12-key alphanumeric keypad.
- **Standardize security feature sets and workflows** across multifunction (MFP) and single function (printer) devices to reduce end-user learning curves across the organization. To accomplish this the new printers would look to their Savin MFP cousins for programming, functionality, and similar card reader hardware options.
- **Improve total cost of ownership for fleet customers.** High Yield supplies averaging 21k/24k prints per bottle (ISO/IEC 19798) and extended life of imaging components keep CPP factors to a minimum.

To address all these concerns, it became clear that two versions of the same high performance engine would allow customers and sales reps alike to benefit from models pre-configured for optimal performance in either environment. One would bring some of the security and system access features from higher volume MFPs downstream for larger accounts; the other would focus on delivering high quality, economical color laser output to smaller offices with equal quality, media, or volume requirements.

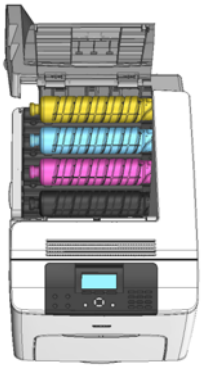
PRODUCT MARKETING OVERVIEW

Savin CLP37DN/CLP42DN Product Concept

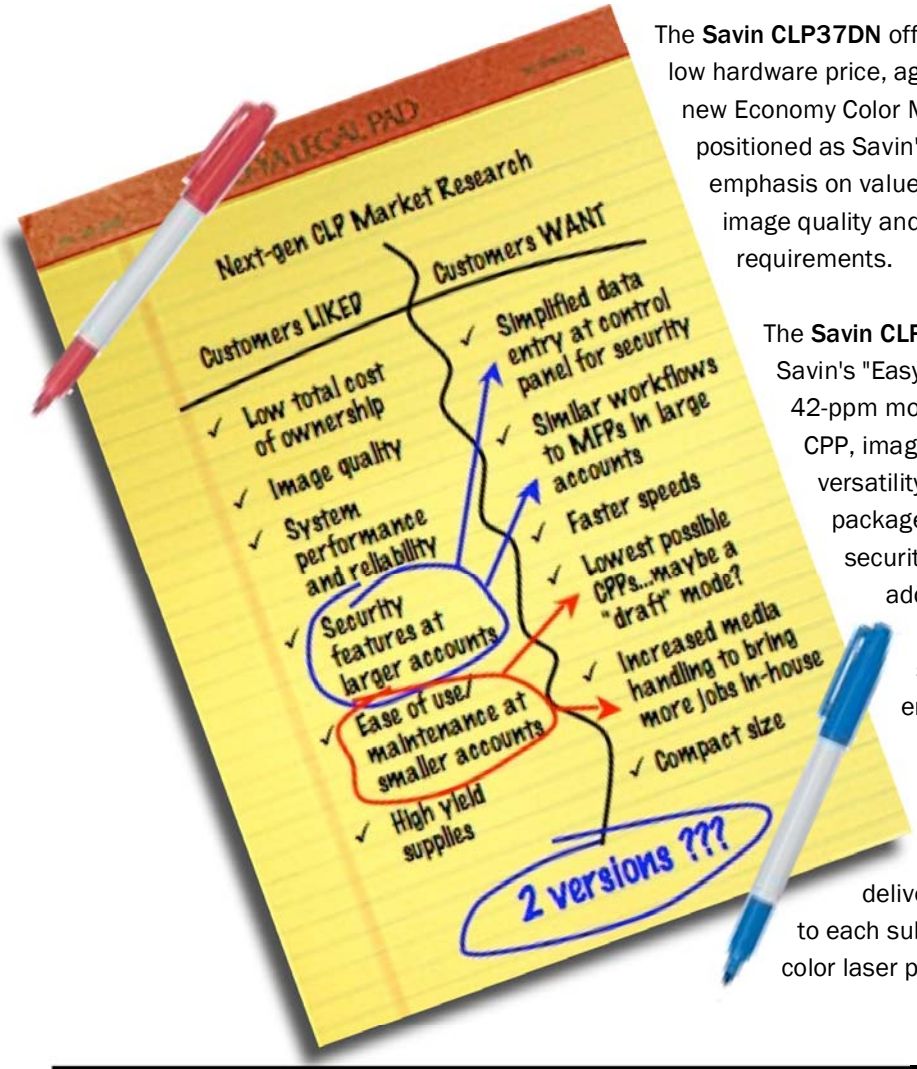
By analyzing market trends and incorporating customer feedback into new product development Savin has put you in position to capitalize on the opportunity for mid-volume color laser printer success.



Savin retained the best of its high quality, award winning, Low TCO (Total Cost of Ownership) CLP131DN Color Laser Printer and refreshed it with the latest technological advancements for increased speed, enhanced ease of use, improved image quality, and the expanded media versatility requested by our customers.



Further, in an effort to better match system capabilities to the different needs and budgets of each target environment, Savin will market this next-generation color laser printer in two versions:


Next-gen CLP Market Research
Customers LIKED
Customers WANT
Low total cost of ownership
Image quality
System performance and reliability
Security features at larger accounts
Ease of use/ maintenance at smaller accounts
High yield supplies
Simplified data entry at control panel for security
Similar workflows to MFPs in large accounts
Faster speeds
Lowest possible CPPs...maybe a "draft" mode?
Increased media handling to bring more jobs in-house
Compact size
2 versions ???

The **Savin CLP37DN** offers a 37-ppm engine with a low hardware price, aggressive CPP factors, plus a new Economy Color Mode. This model is positioned as Savin's "TCO" solution with an emphasis on value for small offices with high image quality and growing volume requirements.

The **Savin CLP42DN** is positioned as Savin's "Easy Security" model. This faster 42-ppm model matches the CLP37DN for CPP, image quality, and media versatility, but is bundled with a package of standard memory and security-related enhancements that add value and ease of use at minimal incremental cost to security-conscious environments.

In effect, Savin split the product in two to map to evolving market trends and deliver a most affordable solution to each sub-class of the mid-volume color laser printer market:

Savin CLP37DN/CLP42DN

31 – 44-ppm Color Laser Printer Market

• Fast Output Speeds • High Resolution Color •
• Media Versatility • Ease of Use • Data Security •
• Low Total Cost of Ownership • Support for Rising Volumes •
• Advanced Document Design • 150,000 Monthly Duty Cycle •

Cost-Conscious Users

- Smaller environments
- Basic high quality color laser printing
- Emphasis on value

Corporate/Government

- Larger user groups
- Higher volumes
- User access & cost control requirements

Savin CLP37DN

37-ppm F/C & B&W
384 MB RAM
Light Security/General Office Needs
Avg. Volume: 3.2K – 20k/month
Estimated Street Price: $1,199

Savin CLP42DN

42-ppm F/C & B&W
768 MB RAM + 80 GB HDD
Heavy Security & Cost Control Needs
Avg. Volume: 5K – 20k/month
Estimated Street Price: $1,599

No matter which model is the right configuration for your customer, both the Savin CLP37DN and Savin CLP42DN support productive and economical full-color and monochrome printing needs with:

- **High performance 600 MHz CPU processors built on the latest version of the Savin Controller Architecture.**
- **Standard 10/100Base-TX Ethernet interface for shared use; USB 2.0 Type B interface for direct connection to a single computer; and a USB 2.0 Type A interface for connection to external devices such as a card reader or PictBridge™-enabled digital camera.**
- **High quality color output at up to 1200 x 1200 dpi plus a number of color simulation and matching tools including PANTONE® support. (Pantone certification expected December 2010).**
- **Enhanced user-friendly control panel featuring a 4-line LCD panel plus a new 12-key alphanumeric keypad for easier user data entry and Locked Print job retrieval at the printer.**
- **Support for a wider variety of media including waterproof paper, banners up to 49" long, envelopes, static cling translucent media (pictured), plus thicker media support from every tray – 120 lb. Index from all paper trays and up to 140 lb. Index through the Bypass.**

- **An expandable paper supply to keep pace with growing volumes. Up to 2,300 total sheets plus standard automatic duplex printing at nearly 100% productivity.**
- **Ultra-low Total Cost of Ownership with CPP factors of 5.1¢ for full-color prints and 1.0¢ for black & white prints*. A new Economy Color Mode separates text from image data to provide light color prints with text at full density to further reduce color printing costs by nearly 50% per page.**
- **Exceptional ease of use and simplified maintenance with a front access paper path for quick mis-feed clearance, one-step toner replacement, and a tilted four-line liquid crystal display panel for improved readability.**
- **150,000-print/month maximum duty cycle for reliable, dependable performance.**

**CPP Factor calculations are based on MSRP for Supply Items. Service/Labor costs are not included. CPP Factors are provided for comparison purposes only. Please see your Sales Manager for actual CPP Factors.*

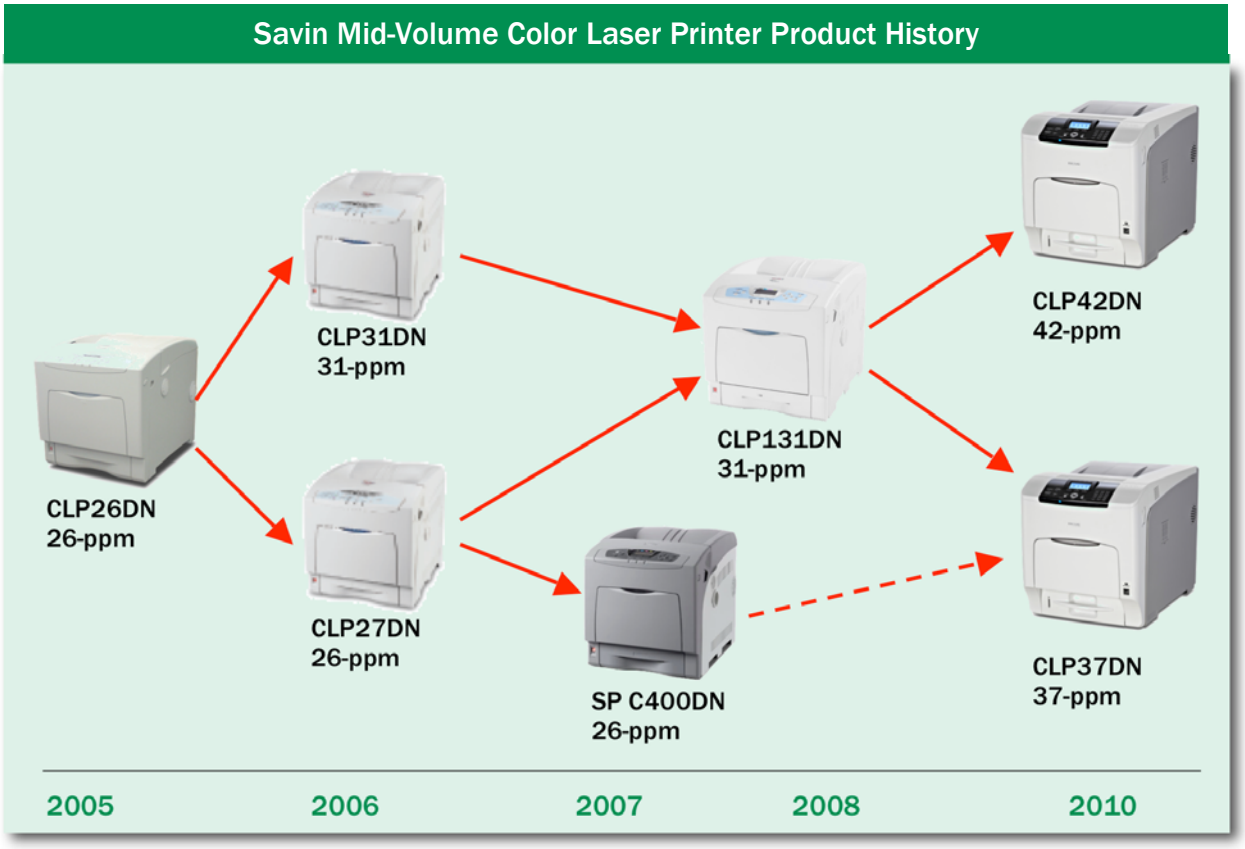
Also note yields and CPPs are different between the CLP131DN and the new CLP37DN/CLP42DN due to the use of the new ISO/IEC 19798 coverage standard.

In sum, the concept behind the new Savin CLP37DN/CLP42DN is to build on the award-winning legacy of previous mid-volume color laser solutions by merging the latest enhancements requested by our customers with Savin's proven engine and controller technologies to meet evolving needs.

2010 Color Laser Printer Product Line Up

The Savin CLP37DN/CLP42DN is a next-generation solution that carries on the tradition begun by the CLP26DN of providing high-performance, reliable color laser printers at an aggressive total cost of ownership.

This graphic shows the progression of Savin's mid-volume color laser printer product line since 2005.



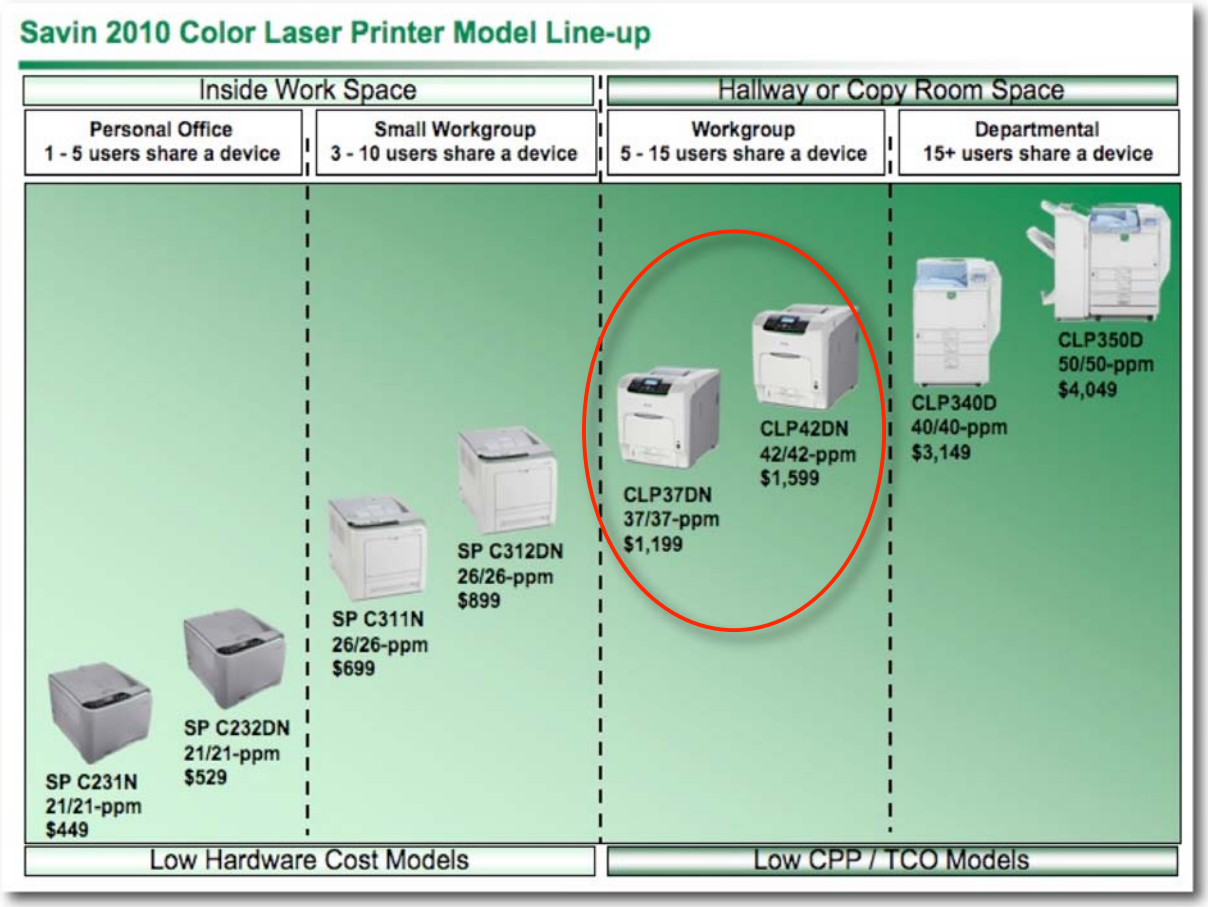
The CLP26DN energized the Savin color laser printer product line by offering equal 26-ppm full-color and monochrome print speeds with standard networking and duplexing. The CLP26DN was one of the first Savin printers to employ the current 4-drum tandem engine/single pass design and the Savin Controller Architecture (formerly called the GW Architecture). It offered a powerful print controller with Genuine Adobe PostScript 3, support for Savin's Embedded Software Architecture, high supply yields, and some basic security features. It was replaced in 2006 by the 26-ppm CLP27DN and the faster 31-ppm CLP31DN. These units delivered lower hardware prices and running costs while improving media support and incorporating more advanced networking, host print, and data security capabilities.

2007 saw the introduction of the Savin SP C400DN, a "light" version of its sister models that featured a reduced hardware price and lower supply yields without sacrificing its 26-ppm productivity or media versatility. To date, this family of printers had offered supplies in only 15,000-page yield sizes. The SP C400DN made supplies available in smaller 6,000-page yield bottles to take a smaller bite out of small business budgets and capture additional business from the budget-conscious customer. The trade-off: higher CPP factors.

The 31-ppm CLP131DN was launched in 2008 as a replacement for both the CLP27DN and the CLP31DN. This extremely successful unit built upon the lineage of its predecessors and offered a faster processor, more memory, and a larger paper supply than ever before. It served to streamline the product line and provide separation between devices. Customers could choose the faster 31-ppm engine with higher supply yields and a lower CPP, or reduce cash outlays with the less expensive 26-ppm SP C400DN and its lower yield supplies without sacrificing image quality. The SP C400DN was discontinued by 2009 as customers showed a clear preference for models offering lower CPP factors. This graphic shows a dotted line progression from the SP C400DN to the new CLP37DN not because it was replaced by the CLP37DN, but because the "demand chain" will lead customers toward this model when they upgrade from the lower-volume/lower-yield SP C400DN.

The common denominator across all these devices has always been superior performance with a low total cost of ownership. That remains true with the new Savin CLP37DN/CLP42DN Color Laser Printer. These two newest versions of this proven engine design replace the CLP131DN. Both are built on the latest version of the Savin Controller Architecture to deliver faster speeds, greater media versatility, improved operability, and the latest networking support at a low total cost of ownership through high yield supplies. *The difference between the pairs of models this time is not speeds, paper handling/duplexing, connectivity, or supply yields, but rather the type of customer environment: general office or security-focused.*

That brings us to today and the revamped 2010 Savin Color Laser Printer Line:



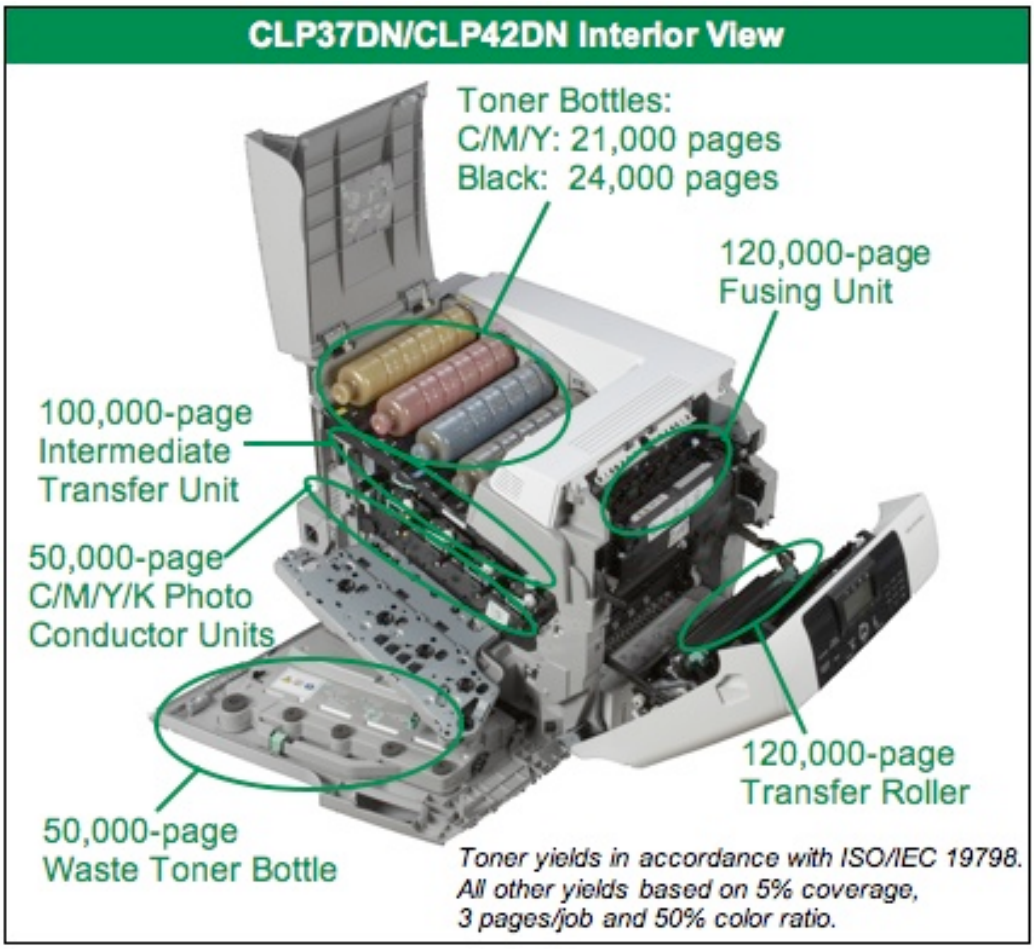
Estimated Street Pricing shown.

Savin CLP37DN/CLP42DN

The 8.5" x 14" Savin CLP37DN and Savin CLP42DN occupy a space between the small workgroup desktop printers and the floor standing departmental solutions with 11" x 17" paper support and optional finishing. The Savin CLP37DN/CLP42DN replaces the CLP131DN and assumes the position as Savin's flagship desktop color laser printer. (Again, note that even though these models use the same supplies, the yields and CPPs are different between the CLP131DN and the new CLP37DN/CLP42DN due to the use of the new ISO/IEC 19798 image coverage testing methodology.) Both versions deliver low total cost of ownership and media flexibility to meet rising volume and quality requirements in environments without the need for in-line document finishing. With a total of eight models in the 2010 product line, Savin color laser solutions now cover every critical speed and price point from entry-level low cost, business color laser printing to high volume color-critical applications with finishing requirements.

Individual Model Positioning

The Savin CLP37DN and Savin CLP42DN both employ the same print engine, paper supply hardware, print controller technology, and supplies. Both support the same operating systems, optional interfaces, and print with equal image quality. However there are several differences in the standard feature sets that contribute to the unique positioning of each model. Let's drill a little deeper into the specifics of both units to see how system specifications and capabilities map to the identified needs of our target environments.



Savin CLP37DN Product Positioning

The Savin CLP37DN is Savin's lead desktop color laser printing solution for busy general offices with growing volume, image quality, and media requirements up to 8.5" x 14".

The Savin CLP37DN is powered by a high performance **600 MHz processor** and **384 MB RAM**. Built on the most recent version of the Savin Controller Architecture platform, the printer is equipped with **standard 10/100Base-TX Ethernet, USB 2.0 Type A & B interfaces**. It supports the **latest networking standards and operating systems** including Windows 7 and Mac OS X 10.6, as well as NetWare, Citrix, and UNIX for seamless installation into virtually any computer/network environment.

The Savin CLP37DN is positioned as Savin's Total Cost of Ownership (TCO) solution with an emphasis on value. With an MSRP of $1,499 and an estimated street price of **$1,199**, users get productive **37-ppm printing for both full-color and monochrome pages** with superior image quality at **600 x 600 (1 bit) or 600 x 600 (2 bit) resolution**. For applications requiring the highest quality output with accurate color, the Savin CLP37DN is capable of printing at **true 1200 x 1200 dpi** (at reduced speeds) with access to a number of **color simulation and matching tools** including PANTONE® support. **Automatic duplexing** at nearly 100% productivity is also standard.

Designed for maximum ease of use, the Savin CLP37DN has a redesigned control panel that features a **tilted 4-line LCD** panel for increased readability and a new **12-key alphanumeric keypad** for simplified user data entry at the device.

The main unit offers a **550-sheet Paper Tray plus a 100-sheet Bypass Tray** standard. The paper supply can be expanded with the addition of **1, 2, or 3 optional 550-sheet Paper Feed Units** to a **maximum of 2,300 sheets**. All paper trays are front-loading, user-adjustable up to **8.5" x 14"**, and support a wide range of media types in weights up to **120 lb. Index**. The 100-sheet Bypass Tray extends acceptable media to sheets as heavy as **140 lb. Index** and banner pages **up to 49" long**.

The Savin CLP37DN's compact footprint is always preserved as additional 550-sheet PFUs are installed directly beneath the mainframe, and prints are sent to the 500-sheet Top Exit Tray for set collation.

Solidly built for lasting value, the Savin CLP37DN carries a maximum engine duty cycle of **up to 150,000 prints per month** during peak period use. The recommended volume range is between **3,200 – 20,000 prints per month, or about 150 – 1,000 prints per business day** with a ratio of 50% color to black & white pages for optimal performance. As discussed earlier, with larger volumes being produced in smaller offices this printer, with its versatile media support, productive speeds, and competitive price can be recommended into environments with populations ranging from **5 to 15 or more end users**.

While all these elements add value to your solution, it is the dollars and cents aspects that truly support the Savin CLP37DN's "TCO" positioning:

- **A competitive street price of $1,199** for a 37-ppm color laser printer with standard networking and automatic duplexing is hundreds below several top competitors.

- **Aggressive cost-per-page factors* of 5.1¢ for Full-color pages and 1.0¢ Black & White pages** are among the lowest CPP factors in its class – as much as 3¢ - 4¢ less than full-color prints from an HP CLJ 4700dn or the Xerox Phaser 6360DN!
  **CPPs based on MSRP for supply items only and use of ISO/IEC 19798.*

- **A new Economy Color Mode** is built into the Savin CLP37DN's controller. More than a simple draft mode, Savin's Economy Color Mode actually discerns the difference between image and text data (text in any color) and prints graphics at a reduced density (about 50%) to save toner while printing text at 100% density for maximum legibility when proofing. The result is light color printing for about half the cost of a full-color page.

Full-color print

Economy Color print

As a result of this model's specifications and positioning, you should recommend the Savin CLP37DN to budget-conscious general office customers with growing volumes who need both speed and quality to achieve their objectives. Emphasize the low total cost of ownership and cost-saving tools built into the printer.

Security & The Savin CLP37DN

Many accounts will inquire as to on-board device access and data security capabilities. While the Savin CLP37DN supports the ability to disable specific network protocols, encrypt print job data, and limit printer access with the User Code feature, this model stops short of offering a complete suite of standard authentication and encryption tools.

When equipped with the optional 80 GB Hard Disk Drive, the Savin CLP37DN is capable of executing the familiar suite of Locked/Stored/Hold Print and user authentication functions. The HDD Encryption and DataOverwriteSecurity System (DOSS) options are available for the protection of documents stored on the HDD. However, if device access and data protection is a top priority for your account, point them to the Savin CLP42DN, pre-configured to address tight security applications.

Savin CLP42DN Product Positioning

With an MSRP of $1,999 and an estimated street price of **$1,599**, the Savin CLP42DN is Savin's premier desktop color laser printing solution for larger corporate workgroups, government, and military customers with high quality color output needs tied to strict data security, compliance, and/or device access requirements.

Like its sister model, the Savin CLP42DN is an excellent choice for busy offices with growing volume, image quality, and media requirements up to 8.5" x 14". It shares all the same media, image quality, networking/connectivity features, and supplies as the Savin CLP37DN. Primary differences are:

1. **Print engine speed is increased to 42-ppm.** Along with this boost in speed comes an increase in the minimal supported volume for this engine: from 5,000 to 20,000 prints/month. This is a simple function of math through its ability to produce 5 more prints per minute. The maximum duty cycle remains 150,000 print/month for both models with an average workgroup size of 5 – 15 or more end users. *Remember, it's volume, not head counts that count!*
2. **Additional memory and software have been added** to the standard configuration to enable a number of advanced security features. While employing the same 600 MHz CPU and Savin Controller Architecture, the Savin CLP42DN adds another 384 MB RAM, an 80 GB Hard Disk Drive, and a VM Card loaded with the software to enable the **Enhanced Locked Print-NX (ELP-NX) function** as a standard capability. The presence of the HDD gives rise to all the user authentication and security tools available on other devices built on the Savin Controller Architecture, but in this case it is the additional RAM and software on the VM Card that take data security to the next level with ELP-NX in the Savin CLP42DN.
3. **The USB 2.0 Type A interface can be used to install an external card reader** for swiping employee magnetic stripe identification cards prior to accessing the printer. A Card Authentication Package with all the necessary hardware is available as an option for this model.

For these reasons, the Savin CLP42DN is positioned as Savin's "Easy Security" solution. The Savin CLP42DN maintains the low total cost of ownership/value positioning of the Savin CLP37DN. It offers the same CPP factors of 5.1¢ for Full-color pages and 1.0¢ Black & White pages. It also supports the Economy Color Mode. **But the Savin CLP42DN adds airtight yet easy to use security features through the unique 12-key alphanumeric keypad to answer the need for data protection, compliance, and/or user tracking capabilities in sensitive environments.**

Recommend the Savin CLP42DN to mid-volume environments with security-related applications such as confidential document printing and/or the need to track or restrict device access by employee.

Examples range from the largest of government agencies and corporate enterprises with thousands of employees that need to control device volume by user or track printing costs for departmental chargeback, to the small medical or legal practices that must show compliance to industry regulations for patient or financial account privacy.

Savin CLP37DN/CLP42DN

Whether printing confidential test results, account statements, drafts of legislation, or weapons designs, the Savin CLP42DN bundles all these enabling security technologies into a pre-configured solution at a very competitive price. Consider that in order to gain ELP-NX functionality on the Savin CLP131DN the total cost would be almost $2,000, and you can see where the new Savin CLP42DN adds value for the security-conscious customer:

Further, the addition of the 12-key alphanumeric keypad makes it easier than ever for users to enter passwords and other data at the control panel, solving a key issue for enterprise-class customers.

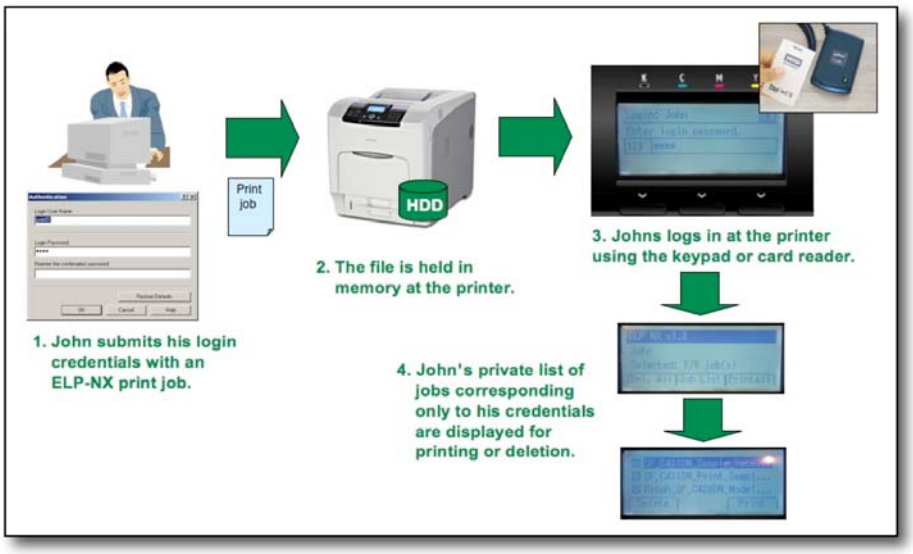
For large entities that tie building/room entry or network access to key-card systems, a Card Authentication Package (CAP) is available as an option for the Savin CLP42DN. The printer is specifically designed to accommodate an external card reader attached to the top cover. To access the printer and release a job, the user must swipe their ID card or badge for authentication.

Enhanced Locked Print-NX Defined

Enhanced Locked Print-NX is the next generation of Enhanced Locked Print. This version works with the latest Savin Controller Architecture technology to add more power to this confidential printing feature. ELP-NX answers one of the large customers' requests to streamline and mirror workflows between Savin MFPs and printers. Here's how it works:

Just as when sending an ELP-NX job from a properly configured MFP, a user submits their login credentials in the printer driver when programming a print job.

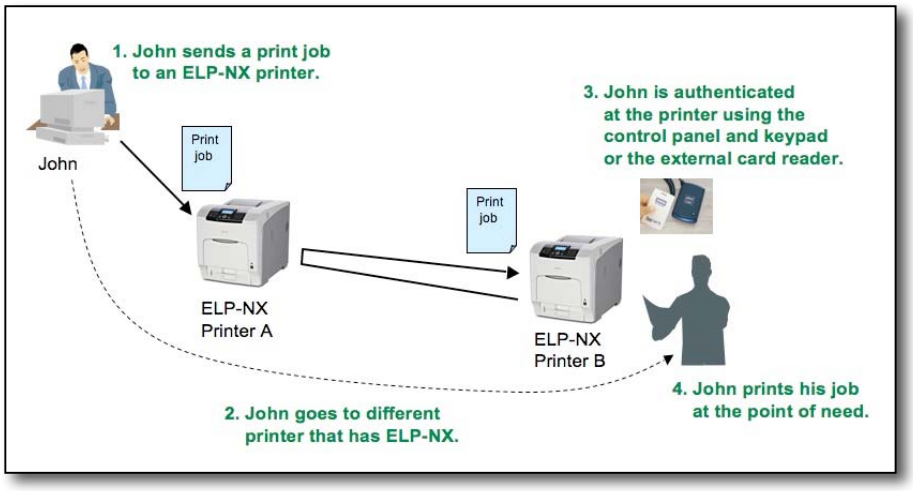
The file is stored at the printer and held in memory until the owner arrives at the device. The user then enters their ID and password using the 12-key alphanumeric keypad or by swiping a magnetic authentication card through the external card reader, if equipped.


Print job
HDD
1. John submits his login credentials with an ELP-NX print job.
2. The file is held in memory at the printer.
3. Johns logs in at the printer using the keypad or card reader.
4. John's private list of jobs corresponding only to his credentials are displayed for printing or deletion.

The LCD panel then displays a list of stored print jobs corresponding only to that user's credentials. The print job can then be printed or deleted.

Enhancements to ELP-NX as implemented in the Savin CLP42DN include:

- The ability to enter user data either via the keypad and control panel or an optional card reader. The print job list screen is displayed in the device's default language.
- The top cover of the printer has been reconfigured to accommodate space for mounting a card reader.
- When the account's network is configured with the optional FlexRelease Server, users can retrieve print jobs securely stored on another ELP-NX enabled device for printing elsewhere on the network, as illustrated here.


1. John sends a print job to an ELP-NX printer.
John
Print job
ELP-NX Printer A
Print job
ELP-NX Printer B
3. John is authenticated at the printer using the control panel and keypad or the external card reader.
2. John goes to different printer that has ELP-NX.
4. John prints his job at the point of need.

Savin CLP37DN/CLP42DN

Similarities & Differences

The following tables review all the primary specifications of both models and highlights the primary differences between them.

Model / Specification	Savin CLP37DN	Savin CLP42DN
Pricing & Yields		
Suggested Retail Price	$1,499	$1,999
Estimated Street Price	$1,199	$1,599
Toner Yields	K: 24,000 pages* per bottle C/M/Y: 21,000 pages* per bottle *Declared yield value in accordance with ISO/IEC 19798	
Cost-Per-Page Factors*	Full-color: 5.1¢ Black & white: 1.0¢ **CPP calculations are based on MSRP for supply items only.*	
Speeds, Volumes & Networking		
Print Technology	Color Laser, 4 drum Tandem Method (Single Pass)	
Max. Output Speed (LTR)	37-ppm for Full-color and Black & white	42-ppm for Full-color and Black & white
First Print Speed	15 seconds for Full-color 10 seconds for Black & white	
Warm-up Time	50 seconds or less	
Recommended Volume	3,200 – 20,000 prints per month 50:50 B&W to Color output ratio	5,000 – 20,000 prints per month 50:50 B&W to Color output ratio
Maximum Duty Cycle	150,000 prints per month during peak period use	
Print Resolution	600 x 600 dpi (1 bit) 600 x 600 dpi (2 bit) -Default 1200 x 1200 dpi (1 bit)	
CPU Speed	600 MHz	
Std./Max. Memory	384 MB / 768 MB RAM	768 MB / 768 MB RAM
Hard Disk Drive	Optional 80 GB HDD	Standard 80 GB HDD
Standard Interfaces	10/100Base-TX Ethernet USB 2.0 (Type A & B)	
Optional Interfaces	Gigabit Ethernet, IEEE 802.11a/g Wireless LAN, IEEE 1284 Parallel	
PDL Support	PCL 5c, PCL 6, Genuine Adobe PostScript3 + PDF Direct Print	
Fonts	136 PostScript 3 fonts, 45 PCL fonts, 13 International fonts	
Operating System Support	Windows 2000, XP, Vista, 7, Server 2003 & 2003R2, Server 2008 Mac OS 8.6 – 9.x, OS X v.10.2+ Novell NetWare v 3.12, 3.2, 4.1, 4.11, 5.0, 5.1, 6.0, 6.5 Citrix Presentation Server, UNIX (Savin Filter Phase 11) Sun Solaris, HP-UX, SCO OpenServer, RedHat Linux, IBM AIX SAP R/3 v.3.x or later	

Similarities & Differences

Continued.

Model / Specification	Savin CLP37DN	Savin CLP42DN
Hardware, Paper Supply & Physical Specifications		
Control Panel	4-line x 16-character LCD panel + Angled 12-key alphanumeric keypad	
Standard Paper Supply	550-sheet Tray + 100-sheet Bypass Tray	
Optional Paper Supply	550-sheet Paper Feed Units (1, 2, or 3 may be added)	
Maximum Paper Supply	2,300 sheets	
Automatic Duplexing	Standard Up to 8.5" x 14", 90 lb. Index maximum weight	
Acceptable Paper Weight	Standard & Optional Trays: 14 - 59 lb. Bond/120 lb. Index (52 - 220 g/m^2) Bypass Tray: 14 - 69 lb. Bond/140 lb. Index (52 - 256 g/m^2)	
Maximum Paper Size	Standard & Optional Trays: 8.5" x 14" Bypass Tray: Banners up to 49" long	
Output Capacity	500 sheets, face down	
Power Consumption	Operating: 825W (CLP37DN), 894W (CLP42DN) Energy Saver: 110W Sleep: 6W	
Dimensions (WxDxH)	17.48"" x 25.9" x 19.3" (444 x 658 x 490 mm)	
Weight	125.4 lb. (57kg)	
Security Features		
128-bit SSL data encryption	Standard	
Locked/Stored/Hold Print	Optional (requires HDD)	Standard
Enhanced Locked Print-NX	Not Available	Standard
Card Authentication Package option (CAP)	Not Available	Optional
HDD Encryption	Optional	
HDD Overwrite (DOSS)	Optional	
500 User Codes	Standard	
User/Admin Authentication	Optional (requires HDD)	Standard
WPA Support	Optional (requires IEEE 802.11 a/g interface)	

Savin CLP37DN/CLP42DN

Target Users & Applications

The Savin CLP37DN/CLP42DN is a general office printer for mid-volume corporate workgroups with business color applications. It offers standard automatic duplexing on media up to 8.5" x 14" with 600 x 600 dpi resolution (1-bit or 2-bit modes, 2-bit is default) at the rated engine speeds of 37/42-ppm. (Speeds are reduced by about 50% for true 1200 x 1200 dpi resolution.)

Savin CLP37DN/CLP42DN Target Environments
Number of Product Users
Number of Total Employees
Division/Department (50 - 100 users)
Large Office (100+ employees)
Workgroup (20 - 30 users)
CLP42DN
Mid-size Office (30 - 99 employees)
CLP37DN
Small Workgroup (3 - 10 users)
Small Office 2 (5 - 29 employees)
SOHO/Sole Professional (1 – 2 users)
Small Office 1 (< 4 employees)

Recommended Volumes & Workgroup Size:

CLP37DN	CLP42DN
3,200 – 20,000 prints/month	5,000 – 20,000 prints/month

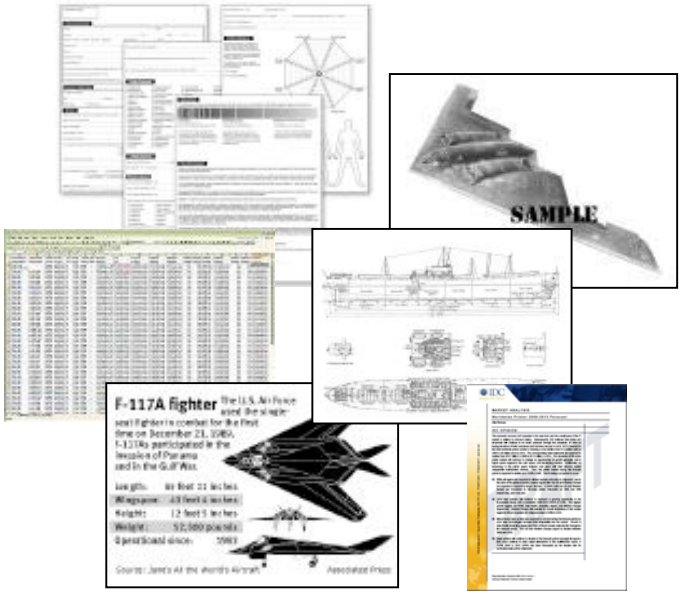
Population: 5 – 15 or more users

We have identified the optimal performance volumes for each model, and emphasized the need to look beyond head counts for Savin CLP37DN/CLP42DN placement opportunities. Which particular model to recommend is mostly a question of the data security needs at the account.

A number of color and image manipulation tools plus wide media acceptance make the Savin CLP37DN perfect for general office printing applications like those shown here. When we say that smaller offices are bringing more volume in-house, it's because of the increased speed, image quality, and media versatility that is migrating down to more affordable desktop solutions, not because of new or vertical applications that can only be performed by a trained end user. We're talking about everyday general business documents like envelopes, postcards, labels, newsletters, reports, presentations, invoices and statements, and customer correspondence. They may be black & white or containing a bit of spot color to highlight deadlines or amounts due on a bill. They may be full-color marketing materials that were previously outsourced like upscale restaurant menus, promotional announcements, and real estate property flyers.

Perhaps they are retail tags and signage that require special media, or direct mailers printed onto more durable card stock. One unique example is translucent static cling media for temporary window signage for retail sales or identifying conference rooms or classrooms.

The Savin CLP42DN extends the range of business color applications to include the production of confidential and sensitive documents like budgets, preliminary product designs, customer lists, human resource compensation plans and employee reviews, announcements, speech and press release drafts, military plans/weapons systems schematics, and of course, personal documents that must comply with HIPAA, Sarbanes-Oxley, and other government regulations for individual privacy.



Either way, workflows should <u>not</u> extend to color critical applications such as proofing or matching corporate logo colors, or those requiring in-line finishing. For those higher quality applications, recommend a Savin CLP340D or Savin CLP350D Series configuration with its 4-bit engine technology (equivalent to 9600 x 600 dpi) and optional finishers.

Savin CLP37DN/CLP42DN

Savin CLP37DN/CLP42DN Key Selling Features	
Superior Productivity	■ Single Pass Engine technology provides equal output speeds for both full-color and black & white printing: 37-ppm for the CLP37DN, 42-ppm for the CLP42DN. ■ Quick first print times of 10 seconds for monochrome and 15 seconds for full-color pages for fast job completion. ■ Warm-up time of less than one minute for near-instant system readiness. ■ High performance 600 MHz controller with 384 MB or 768 MB RAM standard to quickly process files. ■ Latest version of the Savin Controller Architecture supports client and network operating systems including Windows 7 and Mac OS X 10.6 (Snow Leopard). ■ Compatible with Citrix, NetWare, and the Savin UNIX filter to support centralized/host print workflows. ■ Standard Ethernet and USB 2.0 Type A & B connectivity. ■ Address special connectivity needs with an optional Gigabit Ethernet, IEEE 802.11a/g wireless, or IEEE 1284 Parallel interface. ■ Bundled Web Image Monitor utility for simplified device management. ■ Standard automatic duplex printing. ■ 80 GB Hard Disk Drive enables document storage and print on demand for up to 9,000 pages (Standard on CLP42DN, optional on CLP37DN).
Outstanding Image Quality	■ Get sharp text and vibrant color with true 600 x 600 dpi and even higher interpolated resolution of 600 x 600 dpi (2-bit) at rated engine speeds. ■ Crisp laser printing at true 1200 x 1200 dpi at about 50% speed for documents requiring finer detail. ■ New Economy Color Mode produces draft documents with text at 100% density for improved legibility while showing graphic images in light color. ■ Built-in ink simulation allows users to emulate output from offset presses in the U.S. and Europe. ■ Improved color matching capabilities with PANTONE support. ■ Black Overprint function assures precise registration, eliminates text blurring.
Low Total Cost of Ownership	■ Aggressive hardware pricing for complete color laser systems featuring standard networking and automatic duplexing. ■ High yield supplies provide the lowest Cost Per Page (CPP) factors in its class: 5.1¢ for full-color and 1.0¢ for black & white pages (Letter size using ISO/IEC 19798). ■ New Economy Color Mode reduces CPP for internal/draft documents to produce light color prints for about half the cost of a full-color page. ■ Ships with a set of 3,000-page starter C/M/Y/K toner bottles for greater value. ■ Energy Saver Mode conserves power when not in use. ■ ENERGY STAR TIER 2 certified. ■ Standard automatic duplexing saves paper, mailing costs, and filing space. ■ Components for ELP-NX bundled with CLP42DN for reduced cost.

Savin CLP37DN/CLP42DN Key Selling Features	
Versatile Media Handling	■ 550-sheet Paper Tray and 100-sheet Bypass Tray standard. ■ Increase paper supply to a maximum of 2,300 sheets without increasing footprint – 1, 2, or 3 optional 550-sheet Paper Feed Units can be installed beneath the main unit. ■ All paper trays are front-loading, user-adjustable, and support stock sizes up to 8.5" x 14". ■ All paper trays support stock weights up to 59 lb. Bond / 120 lb. Index (220 g/m^2). ■ The Bypass extends media weight to 140 lb. Index and size up to 49" long for banner production. ■ Keep up to five paper sizes and types available at all times, or set them all to the same kind to run long jobs with minimal interruption. ■ Eliminate label printing, peeling, and manually affixing labels to envelopes with direct envelope printing through every paper source. ■ Standard automatic duplexing at nearly 100% of rated simplex speeds. Create two-sided prints on stocks up to 90 lb. Index. ■ 500-sheet Top Exit Tray capacity allows for long periods of unattended operation.
Improved Operability	■ 4-line LCD panel communicates printer status, supply levels, and steps to correct fault conditions. ■ Angled LCD panel improves readability in any lighting condition. ■ New 12-key alphanumeric keypad makes it easy to input user data/passwords and to select stored files for reprinting. ■ Toner bottles easily slide into place in one step. Each color is replaced individually in seconds for maximum uptime, elimination of service calls. ■ Total front access design allows for easy paper mis-feed clearance. ■ PictBridge support connects a digital camera directly to the printer to print photos without using a PC.
Robust Construction	■ Solidly built for lasting value and high reliability with a maximum duty cycle of up to 150,000 prints/month – higher than most competitors in this segment. ■ Average Volume Range: Up to 20,000 prints/month. ■ Designed to support workgroups of up to 15 or more users. ■ High yield toner bottles produce 24,000 Black pages and 21,000 C/M/Y pages. (ISO/IEC 19798) ■ Long lasting imaging components are customer replaceable; 50,000 prints for each OPC Drum, 120,000 for the Fusing Unit, and 100,000 for the Transfer Unit and Rollers.
Advanced Data & Device Security	■ Authentication tools to verify user and administrator rights, restrict printer access (standard on the CLP42DN, optional on the CLP37DN). ■ Support for the latest 128-bit SSL data encryption standards. ■ Locked Print support for confidential documents (standard on CLP42DN, optional on the CLP37DN). ■ User Code feature tracks/limits device use for up to 500 users. ■ Optional data encryption and erasure tools for documents stored on the 80 GB Hard Disk Drive (standard on CLP42DN, optional on the CLP37DN). ■ Enhanced Locked Print-NX standard on the CLP42DN. ■ USB 2.0 Type A interface for connection to an external card reader (CLP42DN only.) ■ Card Authentication Package option for CLP42DN.

CLP37DN/CLP42DN
What's New & Different?

Savin has made a number of enhancements to the functionality of the Savin CLP37DN/CLP42DN Color Laser Printer versus its predecessor, the Savin CLP131DN. While based on similar engine technology, the new Savin CLP37DN/CLP42DN offers a number of enhancements through the implementation of the latest version of the Savin Controller Architecture, faster speeds, expanded media support, and new data protection and device access features to address the needs of security-conscious accounts. The following tables provide a complete comparison between the new Savin CLP37DN/CLP42DN and the unit it is replacing, the Savin CLP131DN.

Savin CLP37DN/CLP42DN versus Savin CLP131DN

What's New?

- One 37-ppm model and one 42-ppm model replace one 31-ppm model.
- Latest version of the Savin Controller Architecture.
- Redesigned control panel with 12-key alphanumeric keypad and angled LCD.
- Economy Color Mode.
- Larger Hard Disk Drive available (standard on CLP42DN, optional on CLP37DN).
- Greater amounts of standard/maximum memory.
- Higher yields on some imaging components.
- Enhanced Locked Print-NX function standard on CLP42DN.
- Card Authentication Package option available.

What's Been Eliminated?

- Low Yield toner bottles.
- Bluetooth interface option.
- Support for IS200e Image Scanner.
- RPCS Driver support.
- Unauthorized Copy Control/Mask Type function.

General Capabilities: What's Different?	Savin CLP37DN/CLP42DN	Savin CLP131DN
Output Speed (LTR)	37-ppm / 42-ppm	31-ppm
Warm-up Time	50 seconds or less	30 seconds or less
Recommended Monthly Volume	CLP37DN: 3,200 – 20,000 prints CLP42DN: 5,000 – 20,000 prints	4,000 – 20,000 prints
Control Panel Type	Angled 4-line LCD + 12-key alphanumeric keypad	4-line LCD
SSE Scanner Support	Not Available	IS200e

Controller Capabilities: What's Different?	Savin CLP37DN/CLP42DN	Savin CLP131DN
CPU Speed	600 MHz	800 MHz
Standard Maximum Memory	CLP37DN: 384 MB/768 MB RAM CLP42DN: 768 MB/768 MB RAM	256 MB/512 MB RAM
Hard Disk Drive	CLP37DN: 80 GB (optional) CLP42DN: 80 GB (standard)	60 GB (optional)
Economy Color Mode	Standard	Not Available
Bluetooth Interface	Not Available	Optional
RPCS Support	Not Available	Standard

Media Capabilities: What's Different?	Savin CLP37DN/CLP42DN	Savin CLP131DN
Max. Weight Via Bypass	140 lb. Index	120 lb. Index
Max. Banner Paper Length	49" long via Bypass	35" long via Bypass

Security Capabilities: What's Different?	Savin CLP37DN/CLP42DN	Savin CLP131DN
Stored/Hold/Locked Print	CLP37DN: Optional CLP42DN: Standard	Optional
Enhanced Locked Print	CLP37DN: Not Available CLP42DN: Standard	Optional
Card Authentication Package	CLP37DN: Not Available CLP42DN: Optional	Not Available
Unauthorized Copy Control	Not Available	Supported

Physical Specs & Yields: What's Different?	Savin CLP37DN/CLP42DN	Savin CLP131DN
Toner Supply Yields	Black: 24,000 prints each* C/M/Y: 21,000 prints each*	C/M/Y/K: 15,000 prints each C/M/Y/K: 5,000 prints each
Maintenance Kit Yields	Fusing Unit: 120,000 prints	Fusing Unit: 100,000 prints
Dimensions (WxDxH)	17.48" x 25.9" x 19.29"	17.56" x 23.2" x 19.17"
Weight	125.4 lb.	110 lb.
Power Consumption	Operating: 825 W (CLP37DN) 894 W (CLP42DN) Energy Saver: 6 W	Max.: 990 W Energy Saver: 6 W

*Declared yield value in accordance with ISO/IEC 19798.

MARKETING THE SAVIN CLP37DN/CLP42DN

The Savin CLP37DN/CLP42DN is an excellent choice for cost-conscious businesses or workgroups of any size with rising volumes of high quality business color printing applications up to 8.5" x 14".

Recommend the Savin CLP37DN to general office environments with light security needs; recommend the Savin CLP42DN to global accounts, corporations with confidential printing requirements such as government vendors and military contractors, and healthcare/legal/financial firms that must comply with state or federal regulations for patient, client, or account privacy.

Keeping in mind the stated volume parameters for optimal performance, the Savin CLP37DN/CLP42DN is ideal for:

Recommended Volumes & Workgroup Size:	
CLP37DN	**CLP42DN**
3,200 – 20,000 prints/month	5,000 – 20,000 prints/month
Population: 5 – 15 or more users	

- Larger workgroups in corporate departments with print-only workflows.
- Smaller offices where the printer will be the primary output device.
- Growing accounts with a full-color MFP that need to add capacity.
- Customers stepping up from mid-volume black & white laser printers to add color.
- Small businesses that are seeking to reduce outsourcing expenses and gain greater control over marketing materials and customer invoicing applications.

Marketing Strategies & Prospecting Tips

Here are some ideas to help get your Savin CLP37DN/CLP42DN sales efforts off to a fast start:

- **Return to your existing Savin accounts to preserve your current customer base.** Keeping your accounts up to date with refreshed Savin technology prevents the competition from encroaching on your territory.
    - **Visit existing B&W laser printer accounts.** Target owners of older Savin MLP Series monochrome printers (MLP25N, MLP32, MLP26, SLP32, and MLP45) and speak with them about upgrading existing capabilities with low cost color.
    - **Visit existing color laser printer accounts.** Check with owners of older Savin CLP Series color printers (CLP831, CLP17, CLP18, CLP22, CLP26DN and CLP1036) to see if volumes and applications have grown beyond the capabilities of their existing equipment. Perhaps they are ready to upgrade to solutions with support for faster/equal color output speeds, integrated full-color duplexing, the latest in data security and user authentication features, or more advanced paper supply or image manipulation functions.

- **Visit existing MFP and Fax accounts.** Can these companies benefit from an additional printer to offload volume for an MFP? Are fax accounts ready to add affordable color laser printing? Leverage the performance of your installed systems to ask for chance to prove printing capabilities. Can you bundle a Savin CLP37DN/CLP42DN when you are upgrading equipment in other areas of the business?

- **Revisit accounts where you have been unsuccessful before.** Perhaps the new Savin CLP37DN/CLP42DN offers a new reason, an exciting new feature, or a better price point or CPP factor than a solution that was rejected before. Maybe the account was waiting for more advanced data protection capabilities. Return to those accounts to see if your new solution is a better fit.

- **Target older competitive devices for replacement.** Just as you will try to upgrade Savin printer and MFP accounts employing older/slower/non-color systems, you should target owners of competitive desktop laser printers from competitors such as HP, Xerox, Oki, Lexmark, Canon, Konica Minolta, Kyocera Mita, Dell, and others for conversion to Savin color laser printers featuring the latest technology for security, image quality, and performance.

  Can't completely replace them? Suggest redeployment. Move older printers to less demanding applications and install the Savin CLP37DN/CLP42DN where employees will benefit most from improvements in speed, quality, security, and cost.

- **Search government and school district websites for RFPs.** The Savin CLP37DN/CLP42DN is an excellent solution for bids and fleet sales. Their competitive prices, ease of use, high yield supplies, and remote web-based monitoring make them perfect for large enterprises seeking to control costs and reduce learning/support curves across an entire organization or school district.

- **Speak to Low Total Cost of Ownership.** The Savin CLP37DN/CLP42DN offers a competitive purchase price plus CPP factors that are among the lowest in its class. All imaging elements and supplies are customer replaceable, eliminating the need for service contracts. The Economy Color Mode reduces the cost of printing draft color documents by up to 50%.

- **Seek out security-conscious accounts.** Look for healthcare, legal, and financial firms in your territory that must comply with industry or government regulations for patient or account privacy. The Savin CLP42DN offers the most advanced security feature set of all Savin printers at a reduced cost by pre-configuring the model. Highlight the addition of the 12-key alphanumeric keypad to make end user data entry and file selection at the control panel easier than ever. At corporate locations where key card entry is required for other areas of building or network access leverage the optional Card Authentication Package to work with existing employee ID cards to provide security without adding to the burden of end users or IT.

- **Inquire about security needs at all sales calls.** The company's business and print workflows may not seem to warrant security features from the outside, so you may not be aware of individual company policies for file retention or data protection. Remember, you can add the 80 GB HDD and encryption as options to the CLP37DN for light security requirements.

- **Highlight wide media latitude to handle nearly every job.** Print volume is the key to printer justification. The more media types a printer can handle allows more volume to be completed in-house, reducing cost and turnaround time while maintaining greater control over image quality and security. Emphasize the Savin CLP37DN/CLP42DN's versatile media handling capabilities to show your accounts how much they can save versus current production methods.

- **Offer Key Operator Training to show users how best to take advantage of printer features.** Maximize customer satisfaction and develop long-lasting relationships by helping end users realize the most value from their investment. Make sure they know how to access features like duplexing, Economy Color Mode, driver image quality modes, and how to load envelopes and change toner. Spend an afternoon training users how to maximize performance and image quality and you'll have a loyal customer for years to come.
- **Promote device customization capabilities.** Does the customer have a need to print specific forms or save files for archival/database applications? Will the printer be placed into a kiosk-type application, or perhaps in a specialized retail environment with a need to print unique receipts? The Savin CLP37DN/CLP42DN can be infused with the ability to meet specialized workflows through Savin's Embedded Software Architecture™ (ESA). Even if there is not an immediate demand for this capability, if your customer has plans to implement customized print workflows in the future, the Savin CLP37DN/CLP42DN stands ready to handle the need when it arises.
- **Ask about special connectivity or printing needs.** The Savin CLP37DN/CLP42DN supports optional interfaces for special environments, such as wireless connectivity in buildings where installing hard-wired network drops is cost prohibitive or impossible. Does the account need to print files from PictBridge-enabled digital cameras? What about Windows 7 and Mac OS X 10.6? Will the account be equipping employees with computers/laptops featuring the latest networking support?

Savin Managed Document Services & The Savin CLP37DN/CLP42DN

Savin's Managed Document Services (MDS) strategy is the next step in the evolution of our Total Document Volume (TDV) approach to controlling all print production workflows at an account.

To execute this strategy successfully you must become more than and MFP or printer sales representative. Rather, you take on a consultant role in analyzing current processes and proposing ways to streamline entire workflows, improve image and document quality, and better manage resources while reducing costs.

Savin MDS is a 4-part process:

1. **Assess.** *Analyze current workflows and identify areas for improvement, correct vulnerabilities, and/or reduce costs.*
2. **Design.** *Recommend the proper mix of hardware and software solutions to address identified issues and improve overall productivity.*
3. **Implement.** *Assist system engineers and account personnel in the installation and end-user training of hardware, security, and software solution components. Help decision-makers explain and navigate changes in workflow to employees.*
4. **Manage.** *Schedule regular meetings with account decision-makers to ensure solutions continue to meet customer expectations. Adjust strategies and installed solutions as business requirements evolve over time.*

Where do the Savin CLP37DN and Savin CLP42DN come in? These models contribute to a powerful, robust product line that supports a wide array of document/device management, security, and software solutions from user authentication to remote monitoring and host print support. When you deliver the right mix of hardware and software solutions, you are more than a vendor; you are a partner providing Managed Document Services!

Will those devices print to current equipment? Is UNIX support required? These questions may help swing the balance in your favor in unique environments.

- **Get IT decision-makers involved in the process early.** These professionals will know what their network requirements are, what security/compatibility issues may arise, and whether they will require any special support. In corporate environments printers and anything else that hangs on the network never gets installed without their approval, so the earlier you can get the IT manager involved in discussions to build their requirements into your proposal, the better your chances of success.

  In smaller businesses where the owner or decision-maker **is** the IT department, be sure to highlight the Savin CLP37DN/CLP42DN elements that lend itself to simple device installation and management (such as auto device discovery, E-mail alerts, Web Image Monitor, Auto Switching/Auto Sensing, etc.) to relieve the stress of sophisticated device management. The Savin CLP37DN/CLP42DN is plug-and-play!

The Savin Value Proposition

Always talk about the Savin Value Proposition in your discussions with prospects and customers. Doing business with Savin and your dealership goes well beyond the initial sale. We seek to develop long-term relationships with customers to serve their needs and grow with them over time.

The Savin Value Proposition

- Establishing and maintaining best practices for electronic document management systems.
- Implementing secure electronic document distribution systems that speed information sharing and reduce expenses, paper usage, and waste.
- Understanding the issues surrounding data privacy and mandated regulatory compliance in financial, healthcare, government, and military applications (Sarbanes-Oxley, HIPAA, Customs-Trade Partnership Against Terrorism, etc.)
- Providing the security tools required to protect data, documents, passwords, and personal information stored on/shared by networked devices.
- Delivering reliable, dependable service and support across all locations.
- Offering assessment and cost recovery solutions, including device utilization analyses, user tracking and/or restriction by mode or device, and remote fleet reporting capabilities.
- Installing technology with minimal environmental impact. Savin solutions are designed to optimize energy efficiency, maximize recycleability, reduce resource consumption, maintain air quality, and to comply with all EPA standards.

This is the added value only you and Savin can provide.

HARDWARE OVERVIEW

This section will provide a detailed overview of Savin CLP37DN/CLP42DN hardware and accessories. The following tables provide product illustrations of key system features, their basic function, and benefit statements to help you position the Savin CLP37DN as an efficient color/monochrome printer for budget-minded, mid-volume customers, and the Savin CLP42DN as the premier solution for security-conscious environments.

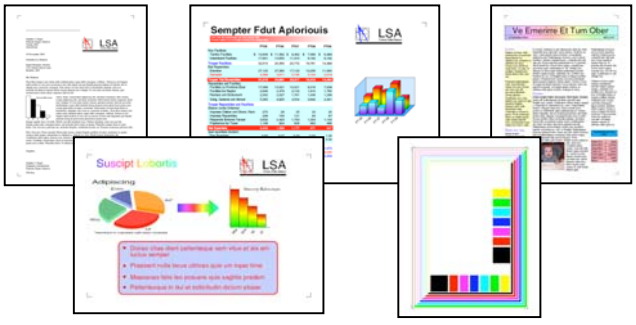
Let's start with the big picture, System Options.

Savin CLP37DN/CLP42DN Page Yields Defined:

Savin is transitioning to the ISO/IEC 19798 international standard as its benchmark process for quantifying toner cartridge yield measurements. This standard has been voluntarily adopted by all of our competitors and ensures an apples-to-apples comparison of supply yields and printing costs across all manufacturers' devices.

This process uses a suite of five test pages, shown here and defined in ISO/IEC 24712. These documents represent more realistic customer output and replace the previous "5% image coverage" standard for calculating page yields.

Therefore, note that while the CLP131DN and the new CLP37DN/CLP42DN use the same toner type, published yields and CPPs are different in part due to the use of the new ISO/IEC 19798 image coverage standard and testing methodology.



ISO 24712 Monochrome & Full-color Test Chart Suite

CLP37DN/CLP42DN
System Options

Primary Savin CLP37DN/CLP42DN standard hardware and optional equipment are shown here; internal options are not pictured, but Part Numbers are summarized in the tables below. This image shows the printer configured with three optional 550-sheet Paper Feed Units.

Individual CMYK Toners*

- Black: 24,000 pages/bottle
- C/M/Y: 21,000 pages/bottle
- 5.1¢ CPP Full-Color
- 1.0¢ CPP B&W
- Easily replaced in seconds

Optional Paper Feed Units

- Front-loading, user adjustable paper trays
- Capacity: 550 sheets each
- 1, 2, or 3 units may be added for up to 2,300-sheet maximum paper supply
- Maximum Size: 8.5” x 14”
- Custom Size:
  Width 3.9” - 8.5”
  Length 5.8” -14”
- Acceptable Weight: 16 – 59 lb. Bond (120 lb. Index)
- Feed envelopes from all sources

CLP37DN/CLP42DN

- CLP37DN: 37-ppm (FC/B&W) @ 600 dpi
- CLP42DN: 42-ppm (FC/B&W) @ 600 dpi
- 600 MHz CPU & Savin Controller Architecture
- 10/100Base-TX Ethernet, USB 2.0 Type A & B interfaces
- 550-sheet Tray (120 lb. Index)
- 100-sheet Bypass (140 lb. Index)
- Maximum 8.5" x 14" size
- Automatic Duplexing
- PCL 5c, PCL 6, and Adobe PostScript 3 + PDF Direct Print
- 500-sheet Top Exit Tray
- 4-line LCD control panel + 12-key alphanumeric keypad
- 500 User Codes + 128-bit SSL encryption standard
- ELP-NX standard on CLP42DN (80 GB HDD + 384 MB RAM + VM Card)

*Declared yield value/CPP calculations in accordance with ISO/IEC 19798.

Savin CLP37DN/CLP42DN Main Units & Hardware Options

Item	Part Number
Savin CLP37DN	406656
Savin CLP42DN (Ships with 80 GB HDD, 768 MB RAM, + ELP-NX.)	406660
Paper Feed Unit PB1020 (1, 2, or 3 may be added)	406681
Tip-resistant Caster Table Type C	406755

Savin CLP37DN/CLP42DN

Savin CLP37DN/CLP42DN Controller Options

Item	Part Number
256 MB RAM DIMM (Type G)	414046
512 MB RAM DIMM (Type I) (Std. on CLP42DN)	414635
80 GB Hard Disk Drive (Type 5000) (Std. on CLP42DN)	413889
VM Card (Type O) (Std. on CLP42DN)	406678
IEEE 802.11a/g Wireless LAN (Type L)	403000
Gigabit Ethernet (Type A)	402547
IEEE 1284/ECP Parallel (Type A)	411699
Camera Direct Print Card (Type H)	406676
HDD Data Overwrite Security (Type K)	402998
HDD Encryption Unit (Type D)	403113
SD Card for Netware Printing (Type D)	406688

Savin CLP37DN/CLP42DN Supplies & Consumables

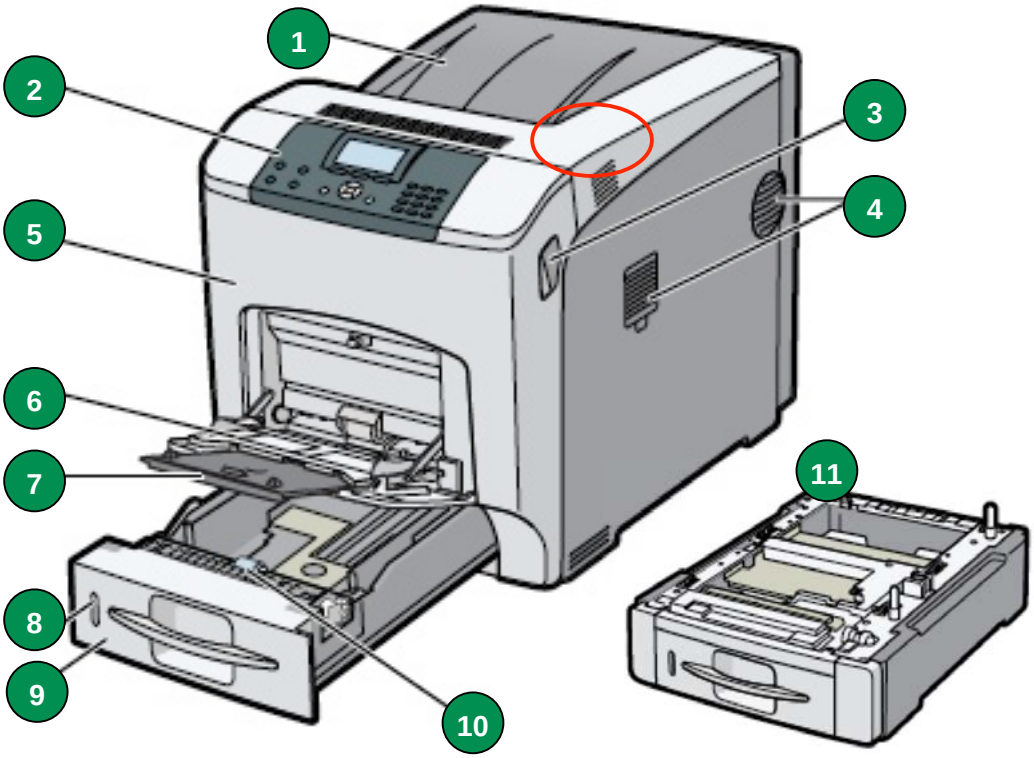
Consumable	Yield	Part Number
Black Toner Bottle CLP37A	24,000 pages*	821078
Yellow Toner Bottle CLP37A	21,000 pages*	821079
Magenta Toner Bottle CLP37A	21,000 pages*	821080
Cyan Toner Bottle CLP37A	21,000 pages*	821081
Black Photoconductor Unit SP C430	50,000 pages**	406662
Color Photoconductor Unit SP C430 (C/M/Y)	50,000 pages**	406663
Intermediate Transfer Unit SP C430	100,000 pages**	406664
Waste Toner Bottle SP C430	50,000 pages**	406665
Maintenance Kit/Fusing Unit SP C430	120,000 pages**	406666

*Declared toner yield value in accordance with ISO/IEC 19798.

**Yield based on 5% coverage, 3 pages/job and 50% color ratio.

Actual yields may vary based on images printed and other factors.

Front View

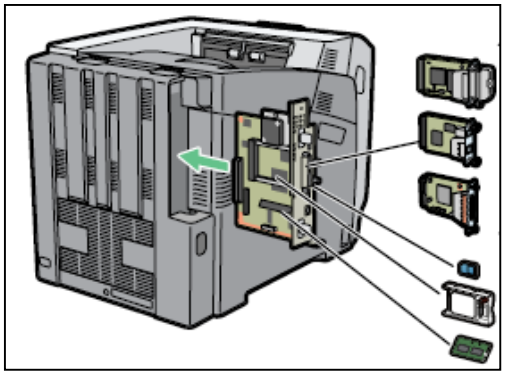


#	Feature/Spec	Function	Customer Benefits
1	Top Exit Tray / Top Cover	500-sheet capacity for printed pages. Open cover to replace toner bottles.	■ All pages sent to the top exit tray for easy pick-up. ■ Minimizes footprint by eliminating side paper exits. ■ Face-down output allows for first-page-first file processing for faster job completion. ■ Easy access to toner bottles. ■ Offers flat area to affix Card Reader option for CLP42DN (circled).
2	Control Panel	Used to configure settings and operate the printer.	■ Angled 4-line LCD panel enhances overall usability with improved graphic display. ■ 12-key alphanumeric keypad for simplified data entry. (*See Control Panel View*)
3	Front Cover Release Lever	Access to interior components for misfeeds/supply replenishment.	■ Simply pull levers (one on each side) toward the front of the printer to open the front cover for easy access to the paper path for jam recovery or to replace system imaging components.
4	Vents	Releases heat from internal components.	■ Prevents overheating. Dustproof filters prevent foreign elements from entering printer.

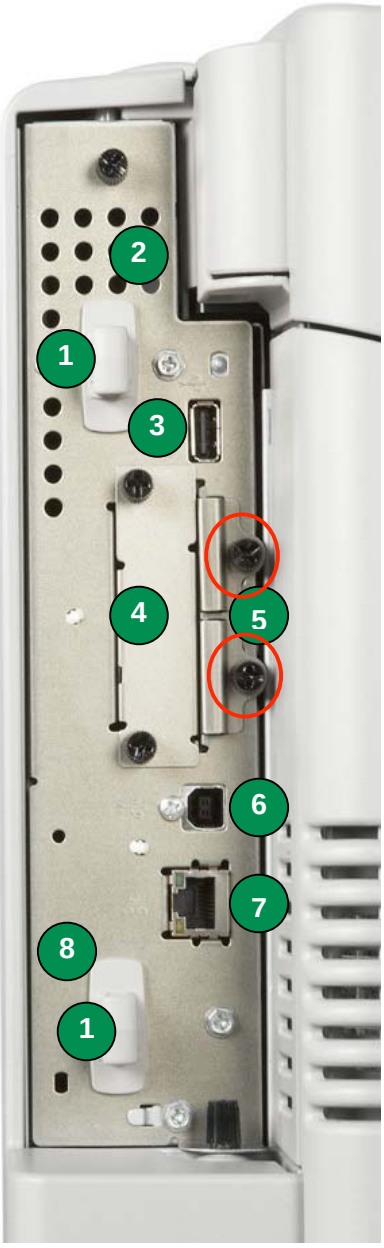
#	Feature/Spec	Function	Customer Benefits
5	Front Cover	Open to replace imaging components or to remove mis-fed paper.	■ Easy access to internal printer components and the paper path from the front of the machine.
6	100-sheet Bypass Tray	Accepts 14 lb. Bond to 69 lb. Bond (140 lb. Index) paper stocks. Custom Sizes: Width 2.8" - 8.5", Length 5.0" -49.6" Load the side to be printed **FACE DOWN**.	■ Allows users to feed special/heavyweight stocks up to 140 lb. Index without changing the paper supply inside the Tray(s), minimizing job set-up time. ■ Accepts small stocks for the production of postcards, labels, name cards, envelopes, etc. ■ Enables banner printing for signage and posters. ■ Bypass Tray folds out from front, minimizing space requirements when not in use.
7	Bypass Tray Extension	Pull out to load larger sheets in the Bypass.	■ Supports media longer than 11" when feeding stocks via the Bypass.
8	Paper Gauge	Indicates the amount of paper remaining in each Tray.	■ Users can easily see if the amount of paper in the tray is enough to complete the current job or requires replenishment.
9	Standard 550-sheet Paper Tray	Accepts 14 lb. Bond to 59 lb. Bond (120 lb. Index) paper stocks. 8.5" x 14" maximum output size. Custom Sizes: Width 3.86" - 8.5", Length 5.8" -14" Load the side to be printed **FACE UP**.	■ Front-loading, user adjustable tray for easy access and quick set up for every job.. ■ Total 650-sheet standard paper capacity includes a 550-sheet tray plus 100-sheet Bypass Tray for added media flexibility. ■ Feed large quantities of heavyweight media or envelopes via the standard tray for increased productivity. ■ Each tray holds an entire ream of paper (500 sheets @ 20 lb. Bond) to eliminate spoilage and waste.
10	Paper Feed Roller	Ensures one sheet of paper is fed at a time.	■ Guards against multi-sheet misfeeds for increased productivity and minimal downtime.
11	Optional 550-sheet Paper Feed Units (PFU) ***(1, 2, or 3 units may be added.)***	One, two, or three additional 550-sheet Universal Paper Trays can be added to raise paper capacity to a maximum of 2,300 sheets. Load the side to be printed **FACE UP**.	■ Matches all media size and weight specs of the Standard Paper Tray for media consistency throughout the entire system. ■ Provides capacity to handle long jobs and high volumes. ■ Set each source for a different size to maximize versatility, or set all sources to the same type to run long jobs with minimal interruptions. ■ Each PFU installs beneath main unit to preserve system footprint.

Rear View

The Savin CLP37DN and Savin CLP42DN are both powered by a 600 MHz CPU built on the latest version of the Savin Controller Architecture. This powerful brain is supported with 384 MB RAM standard in the Savin CLP37DN, and with a total of 768 MB RAM plus the 80 GB Hard Disk Drive and an SD Card for ELP-NX standard in the Savin CLP42DN.



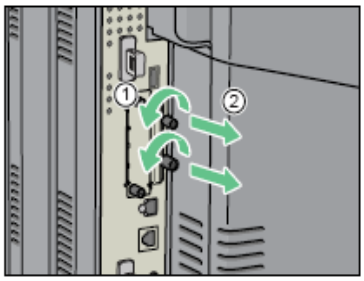
The controller board slides out from the rear of the main unit for the installation of optional memory or the HDD in the Savin CLP37DN, and/or optional interfaces in either model.



VM or SD Cards for added functionality are installed by removing the two screws of the Card Slot cover only (circled). The controller board does not have to be removed for the installation of VM or SD cards.

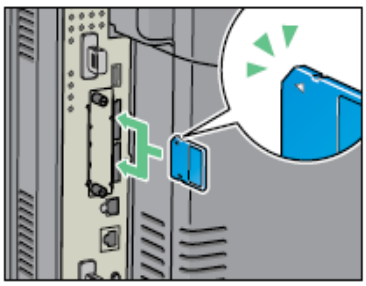
The Upper slot can be used to install the:

- Camera Direct Print Card for PictBridge
- SD Card for NetWare printing
- DataOverwriteSecurity Unit (DOSS)



The Lower slot can be used for the:

- HDD Encryption Unit
- To install ESA applications
- To install the VM Card for ELP-NX functionality in the Savin CLP42DN.



#	Feature/Spec	Function	Customer Benefits
1	**Controller Board Handles (2)**	Grips for pulling out the controller board.	■ Easily slide the controller board out for upgrades.
2	**Optional RAM DIMM** ***(Internal, not shown)***	Enables advanced printing functions in the CLP37DN. *RAM cannot be upgraded in the CLP42DN.*	■ Add 256 MB or 512 MB RAM to speed job processing. ■ Additional RAM enables full-color duplex printing on Legal size paper at 1200 x 1200 dpi resolution. ■ Up to 150 pages can be stored in printer RAM for collation.
3	**USB 2.0 Type A Interface**	Standard USB 2.0 Type A port provides direct connection to external devices. *Requires installation of Camera Direct Print Card option or CAP option.*	■ Enables digital camera photo printing without connection to a PC or launching picture viewing software on the Savin CLP37DN/CLP42DN. ■ Control image printing via user's PictBridge-enabled digital still camera and LCD screen. ■ Enables connection of external card reader for use with ELP-NX function (CLP42DN only). *See Core Technologies for details about PictBridge.*
4	**Optional Interface Board Slot**	Provides a slot for the installation of one of the optional interface boards.	■ Customers can install the type of optional interface to meet their unique connectivity needs. Choose from: ■ **IEEE 802.11a/g Wireless LAN (WPA-enabled)** ■ **Gigabit Ethernet** ■ **IEEE 1284/ECP Parallel Interface** *See Core Technologies for details of each option.*
5	**SD Expansion Card Slots**	Provides two SD Card slots for the installation of optional expansion cards to enable additional printer functionality.	■ Customers can add functionality by inserting the desired option into an Expansion Card Slot. ■ **Camera Direct Print Card:** Enables image output directly from PictBridge digital cameras. ■ **VM Card (Java Virtual Machine for Software Development Kit (SDK):** Application customization tool for use with Savin's Embedded Software Architecture™ (ESA). ■ **DataOverwriteSecurity Unit (DOSS):** Erases data stored on HDD to government standards. ■ **HDD Encryption Unit:** Scrambles data stored on HDD for confidentiality and security. ■ **NetWare Printing Card:** Enables networks running NetWare to communicate with the printer. ■ **ELP-NX VM Card:** Contains the software to enable advanced ELP-NX functions. Ships standard with CLP42DN only. *See Core Technologies for details of each option.*

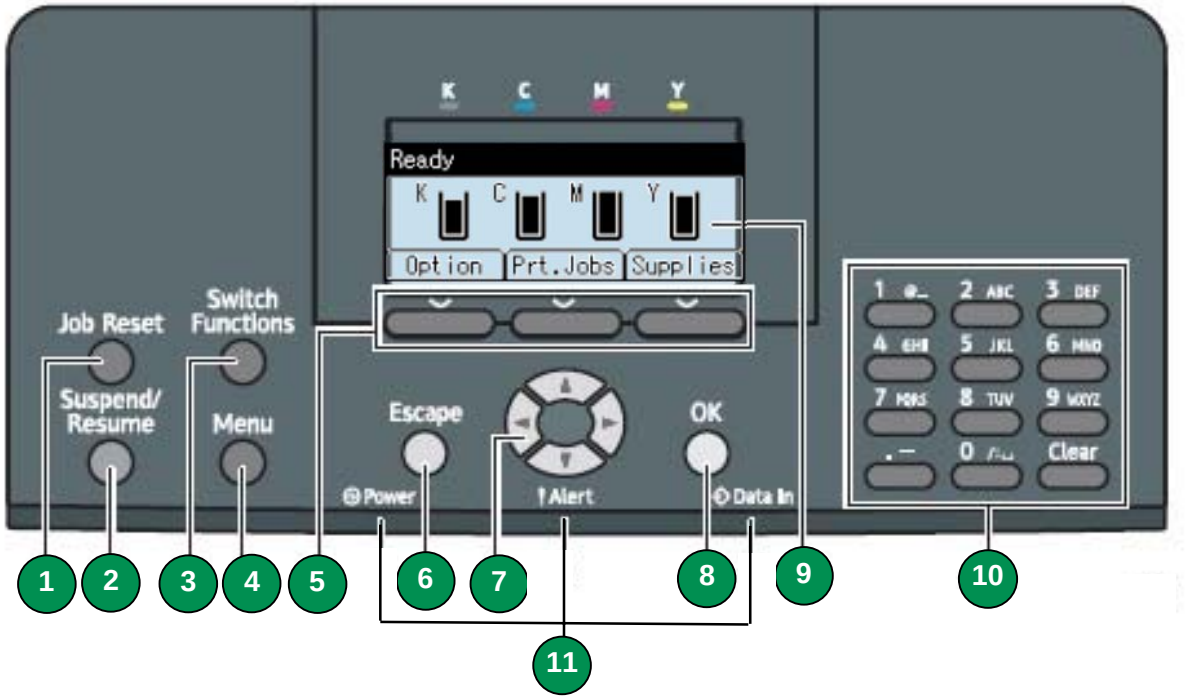
#	Feature/Spec	Function	Customer Benefits
6	**USB 2.0 Type B Interface**	Provides for direct connection to a single computer.	■ Allows for simple plug-and-play 1:1 connection to drive all jobs from a single host PC. ■ Supports the faster 2.0 High Speed standard for faster data transmission.
7	**10/100Base-TX Ethernet Interface**	Connects the printer to a Local Area Network via the RJ-45 port.	■ Standard NIC maximizes customer investment by enabling shared use at no additional cost. ■ Supports fast data transfer speeds of 10Mbps or 100Mbps to speed printing in multi-user workgroups. ■ LEDs positioned on each side of the port illuminate to confirm proper network connection and status.
8	**80 GB Hard Disk Drive** ***(Standard on CLP42DN, optional on CLP37DN)*** ***(Internal, not shown)***	Attaches to the main controller board to enable advanced printing, document storage, and security functions.	■ Enables Hold Print/Stored Print and other security-related features to maintain document confidentiality. ■ Provides memory space for job spooling, permanent PostScript font storage, electronic collation, data encryption, storing log data, and RIP Once/Print Many functions. ■ Portion of disk space is reserved for document storage, up to 9,000 pages or a total of 100 Locked/Stored/Hold Print jobs.

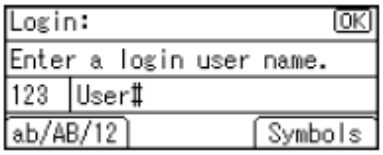
Control Panel View

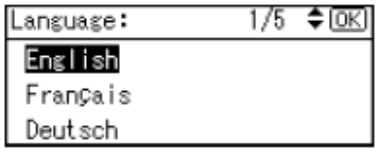
Once a printer is properly installed on the customer's network, daily job programming is done by the end-user via printer drivers at a connected PC. The flexible Savin CLP37DN/CLP42DN offers a choice of programming jobs using familiar PCL drivers or the genuine Adobe® PostScript®3™ driver *(see Core Technologies)*. Also available via download from the Savin web site is the XPS driver for Windows Vista.

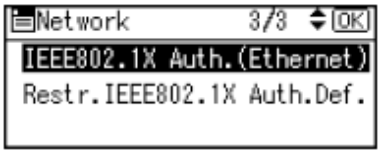
Network settings and device monitoring tasks are usually managed using a remote software utility like Savin's SmartDeviceMonitor or Web Image Monitor.

At the device, the Savin CLP37DN/CLP42DN features a large 4-line LCD operation panel that displays the status of consumables at a glance. For easier operability, it also provides ample room to display job lists, network settings, and error messages. One of the most noticeable areas of improvement to printer operability is the addition of the 12-key alphanumeric keypad for the entry of User IDs and passwords in accounts with security requirements. The following table outlines the functions of the Savin CLP37DN/CLP42DN control panel:







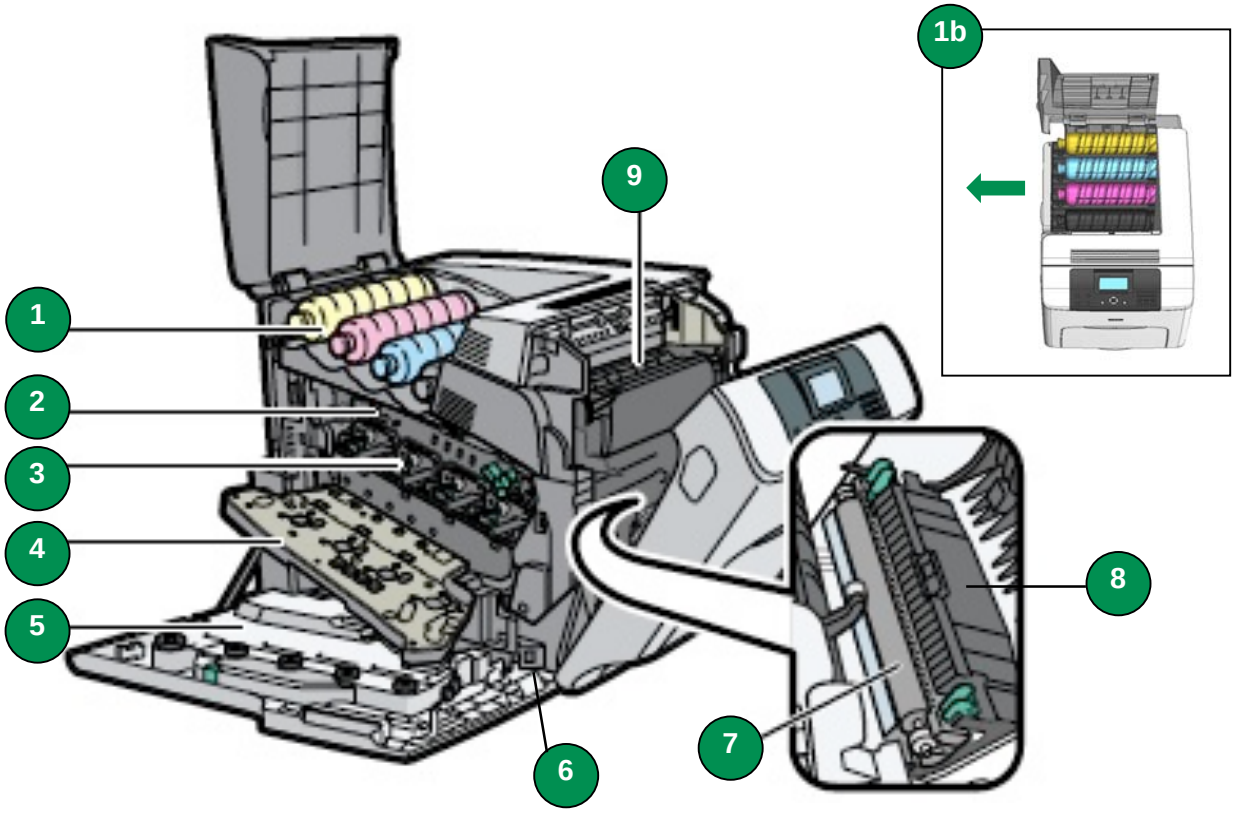


#	Feature/Spec	Function	Customer Benefits
1	**Job Reset key**	When the printer is online, press to cancel a current job.	■ Quickly cancel a current job directly at the printer, saving toner and supplies for incorrect or unwanted page volumes in case of error.
2	**Suspend / Resume key**	Press once to take the printer offline to perform maintenance or replenish supplies; press again to return to online status.	■ Stops a job in progress at the device. Print job data remains in memory and the job can be restarted. ■ Allows users to pause printing to check image quality, change settings, or replenish supplies and then resume printing without returning to their PC or having to reprogram the job.
3	**Switch Functions key**	Press to alternate between the default printer LCD screens and extended features enabled through SD Cards.	■ Top-level access to extended printer functionality. ■ When pressed, users can scroll through embedded applications (ESA) and activate extended functions resident in the printer via SD/VM cards.

#	Feature/Spec	Function	Customer Benefits
4	Menu key	Press to make and confirm current printer settings.	■ One-touch access to printer settings such as display language, paper sizes, and configuring network and security settings.
5	LCD Panel Selection keys	Correspond to choices available to the user in each LCD screen.	■ Aligned directly beneath columns in the LCD Panel for proper selection of desired feature or mode confirmation.
6	Escape key	Returns the printer to the previous condition appearing in the LCD.	■ Allows users to clear an incorrect selection without having to reprogram an entire sequence of job steps.
7	Arrow keys	This circle of 4 keys is used to scroll through and enter printer values and settings. Moves the cursor in the indicated direction	■ Scroll through choices for communication modes and active protocols, or to change value settings that appear in the LCD panel such as IP Address numbers, wireless channel numbers, etc. ■ Quicker scrolling is accomplished by pressing and holding the up/down arrow key to increase/decrease displayed values in units of 10.
8	OK key	Sets the item currently displayed in the LCD.	■ Easily confirm printer settings and values, and move to the next menu level.
9	4-line LCD Panel Display	Displays current printer status and error messages. Enhanced functionality graphically displays toner, supply status.	■ Larger LCD panel easily displays device and network settings, error messages, access logs, supply information, as well as jobs in the print queues. ■ Graphically displays supply/memory data. ■ Easier for users to see lists of stored files. ■ Displays all choices for initial printer configuration.
10	12-key Alpha-numeric keypad	10 number keys plus Clear and ./- keys allow users to enter characters and numbers at the device.	■ Easily enter User IDs for Locked Print or ELP-NX jobs. ■ Press each key repeatedly to scroll through the text characters each number represents (similar to fax machine speed dial programming). ■ Use Selection keys (#5) to change case, enter numeric characters, or enter symbols.
11	Power, Alert, & Data In Indicators	Indicators light or blink to visually inform users of system status.	■ **Power Indicator** remains lit whenever power is on; flashes when warming up or receiving data; dark in Energy Saver mode. ■ **Alert Indicator** blinks to warn users of printer errors. A corresponding message describing the error and corrective actions appears in the LCD panel. ■ **Data In Indicator** blinks when the printer is receiving data from a computer; lights continuously when data remains in memory.

Interior View

Engineered for simplified maintenance and fast access to all device components, the Savin CLP37DN/CLP42DN provides maximum uptime through quick and clean end-user replacement of all consumables and supplies. In fact, everything is user-serviceable!



#	Component	Yield	Customer Benefits
1	Individual C/M/Y/K Toner Bottles *(Inset 1b: Top View of cover open)*	Black Toner bottles are rated to produce 24,000 prints; Cyan, Magenta, and Yellow bottles are rated to produce 21,000 prints (in accordance with ISO/IEC 19798).	■ Easily replaced by end user; simply open the top cover and slide in a new bottle in an improved 1-step process. ■ Bottles are coordinated to color decals and notched to ensure placement in proper toner position. ■ Long lasting for minimal interruptions.
2	Intermediate Transfer Unit	100,000 pages.	■ Slides out in one complete component for fast and clean replacement. ■ Latent images from all four OPC drums are placed onto the belt in a single pass for precise registration. ■ Long lasting, contributes to low TCO. ■ Easily replaced by end user.

#	Component	Yield	Customer Benefits
3	**Individual C/M/Y/K Photo-conductor Drum Units**	50,000 prints each. Note: The 3 Color drum units are bundled together and sold as a single supply item with one Part Number.	■ Located behind protective inner cover to minimize exposure to ambient light. ■ Individually replaced for minimal total cost of ownership. ■ Identical yields for all colors allows for coordinated purchasing and replacement, simple CPP calculation. ■ Easily replaced by end user.
4	**Inner Cover**	Open to replace a drum unit or transfer unit.	■ Protects sensitive imaging components (OPC drums, Intermediate Transfer Belt) from exposure to ambient light, dust.
5	**Waste Toner Bottle**	50,000 pages.	■ Catches residual toner created during imaging process. ■ Attached to inside left door with ports precisely aligned with Photoconductor Units. ■ Easily replaced by end user.
6	**Power Switch**	Turns the printer on or off.	■ Located at the front of the machine for easy access. ■ 50-second warm-up time for near-instant readiness.
7	**Transfer Roller**	100,000 pages.	■ Moves completed latent image from Intermediate Transfer Belt to the paper and into the Fusing Unit. Replace this roller in conjunction with the Fusing Unit. ■ Long lasting. ■ Easily replaced by end user.
8	**Integrated Automatic Duplexing** *Standard*	Inverts pages for second-side imaging. Acceptable paper weight range for duplexing: 16 lb. Bond to 44 lb. Bond (90 lb. Index).	■ Integrated duplexing produces two-sided pages at nearly 100% of rated simplex speeds. ■ Because the duplex unit is integrated into the device and not an add-on, better reliability when duplexing is achieved. ■ "Stackless" technology removes limitations on duplex set production, minimizes waste in the event of a jam. ■ Accepts heavyweight stocks up to 90 lb. Index for two-sided printing of business cards, postcards, menus, etc.
9	**Fusing Unit**	120,000 pages. Located behind front cover.	■ Melts toner into paper using pressure and high temperatures before sending finished prints to top exit tray. ■ Long lasting. ■ Easily replaced by end user.

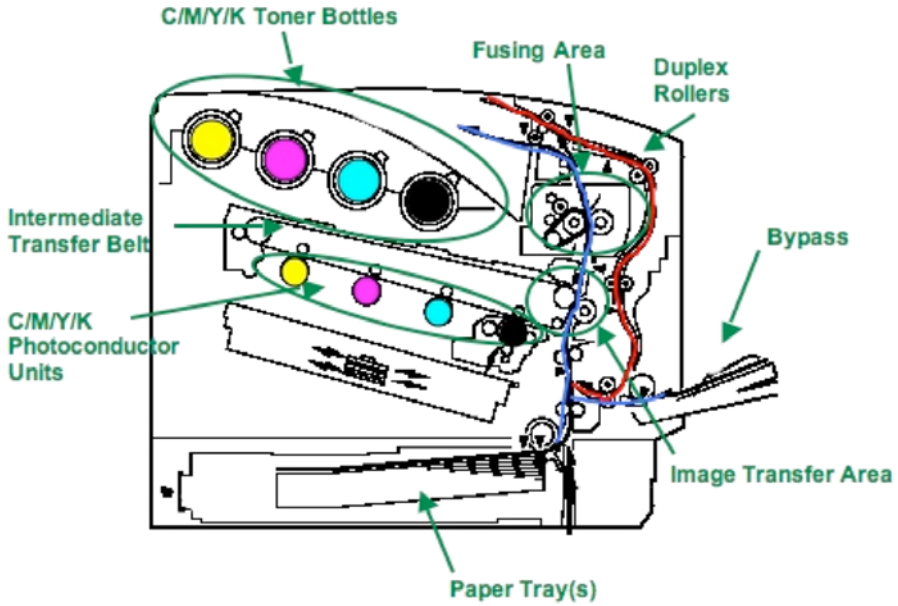
CORE TECHNOLOGIES

While the Savin CLP37DN/CLP42DN builds on the strong lineage of its predecessors, Savin has upgraded several features and technologies to deliver a true next-generation color laser printer solution. If you have experience selling Savin CLPxxDN model printers, much of this information will be familiar to you. If you are new to selling Savin color laser printer solutions this section provides an understanding of how your product operates and gives you insight into why your solution is superior to competitive alternatives. That translates into knowledge and credibility, and allows you to uncover applications that are important to your customers.

So let's take a look under the hood and review several key technologies that make the Savin CLP37DN/CLP42DN a leading solution for cost-conscious, mid-volume workgroups with mixed color and black & white printing and/or data security needs.

Compact User-friendly Design with 4-Drum/Single Pass Printing Technology

The Savin CLP37DN/CLP42DN employs a tandem-drum design in which all four photoconductor units are positioned in a straight line beneath the Intermediate Transfer Unit and corresponding 24,000/21,000-page yield toner bottles. This arrangement contributes to the system's compact design, fast first print times, and equal black & white/full-color output speeds of 37-pm or 42-ppm. Single-pass printing transfers all four colors (CMYK) to the Intermediate Transfer Belt simultaneously versus the older four-revolution method (one turn of the drum for each color) of single drum engines. In addition to faster and equal speeds for both color and black & white pages, single-pass printing produces highly defined prints with superior registration.

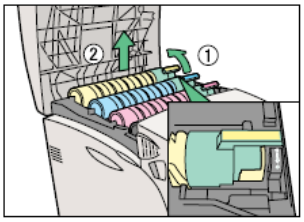


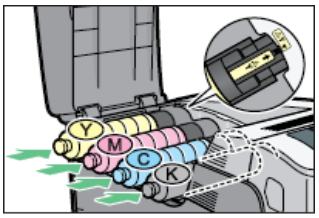
Blue line indicates simplex paper path.

Red line indicates duplex paper path.

This in-line drum design allows for toner cartridges and photoconductor units to be replaced individually as needed. Customers get maximum use and value from every consumable element – no more throwing away partially used supplies when only one color has reached its yield.

One new design change that improves user friendliness is one-step toner replacement. Whereas the Savin CLP131DN required sliding and then locking/unlocking each toner bottle into place, in the new Savin CLP37DN/CLP42DN users simply slide in a new bottle in a single step. No locking is required – just push the toner bottle into place until a click is heard.





CLP131DN
Two Steps

CLP37DN/CLP42DN
One Step

Another enhancement is the design and position of the control panel. In addition to providing a 12-key alphanumeric keypad and well spaced, clearly labeled keys and indicators, the entire front of the machine has been redesigned to tilt the control panel and 4-line Liquid Crystal Display for a wider field of viewable angles from either standing or sitting positions.

CLP131DN

CLP37DN/CLP42DN

Further, the Savin CLP37DN/CLP42DN's short, soft curved paper path allows for thicker stock acceptance throughout the system, as well as easy mis-feed clearance in the event of a paper jam – all paper jams are always cleared from the front of the unit.

Simplex prints (paper path noted in blue) are made when paper travels vertically up through the engine and sent directly to the top exit tray. Because of its short, soft curve paper path, the Savin CLP37DN/CLP42DN reliably prints onto thick paper stocks as heavy as 59 lb. Bond (120 lb. Index) via the Standard Tray and optional PFUs, and up to 69 lb. Bond (140 lb. Index) via the Bypass.

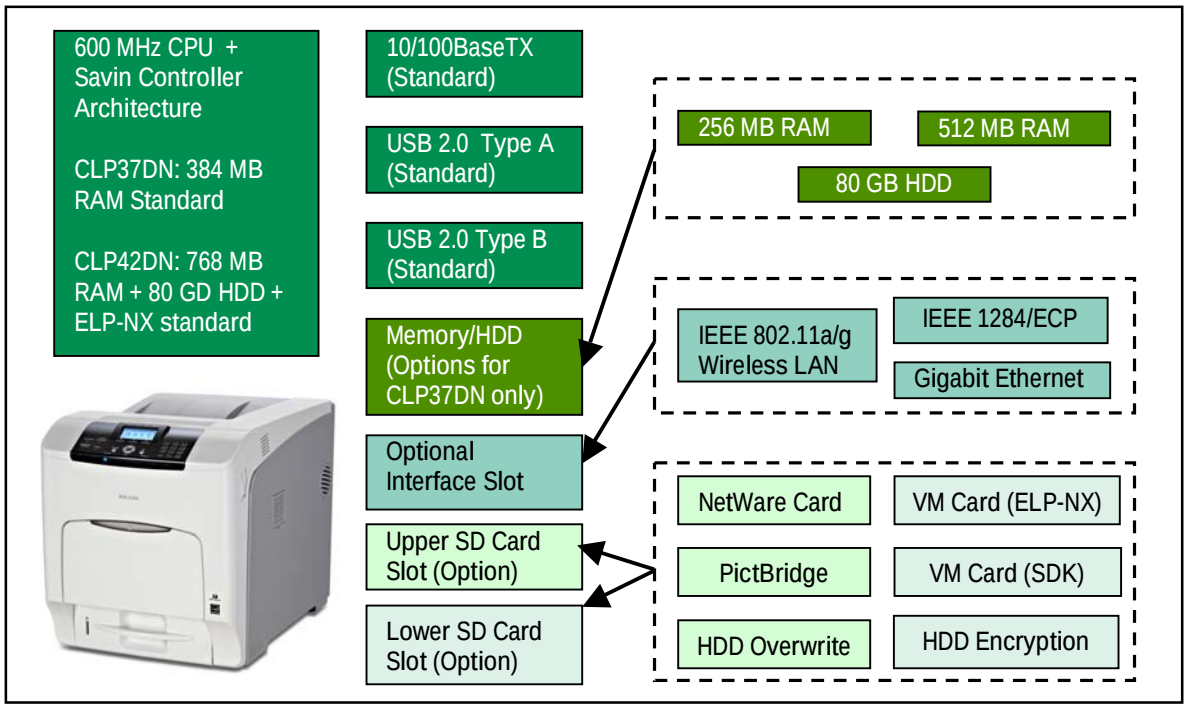
Duplex prints (paper inversion path noted in red) are made by returning the sheet to the imaging area through a series of rollers where it is inverted for second side imaging before being sent to the top exit tray. This short, direct paper path from the integrated duplex unit contributes to two-sided print speeds almost equal to simplex speeds for maximum productivity, and allows media up to 90 lb. Index to be printed on both sides automatically.

No matter how many additional 550-sheet Paper Feed Units are installed, the Savin CLP37DN/CLP42DN always retains its compact footprint for desktop placement.

A Tip-resistant Caster Table is available for accounts that configure the printer with optional PFUs and wish to place unit on the floor. The base has wheels that enable mobility and are designed with side support wings for extra stability.

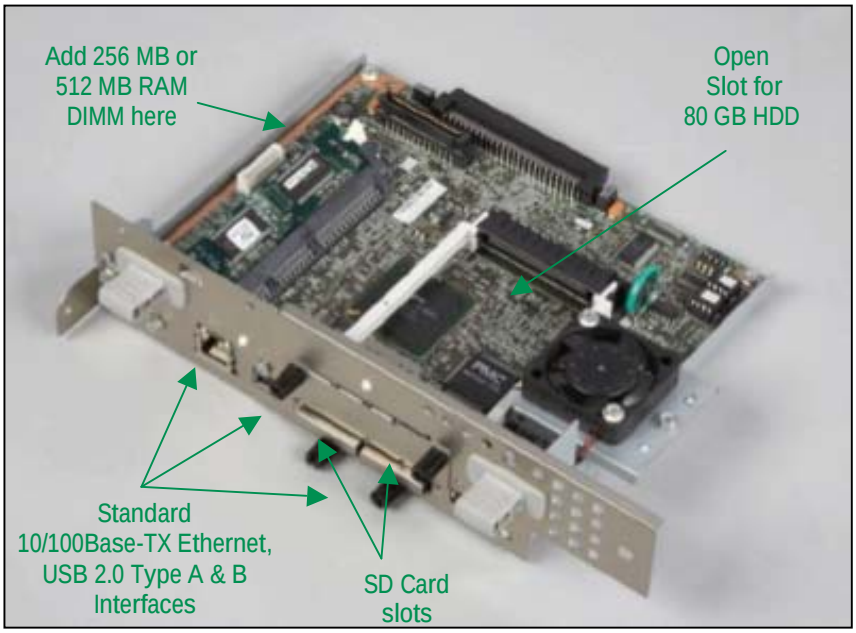
Another enhancement to Savin CLP37DN/CLP42DN design is the implementation of a second heating element in the fusing unit. This enables the printer to achieve faster output speeds than the Savin CLP131DN by increasing the fusing temperature to melt toner into paper more quickly. This explains the additional power consumption required by the Savin CLP37DN/CLP42DN.

Print Controller, Memory, & Interfaces



Note: *The Savin CLP37DN can be equipped with the optional 80 GB Hard Disk Drive and additional RAM to access user authentication and Locked Print functions, but will not support the ELP-NX function.*

Print Controller



The Savin CLP37DN/CLP42DN employs a powerful **600 MHz processor that features the latest version (Autumn 2009) of the premier Savin Controller Architecture.** This print controller quickly processes incoming data streams for printing at speeds **up to 37-/42-ppm** to provide the bandwidth required to handle multiple jobs in busy networked environments. This controller version and motherboard leverages the proven design of earlier Savin CLPxxDN printers. It provides a number of advanced features such as **128-bit Print Data Encryption via IPP, 500 User Account Codes, and device customization capabilities (ESA™) standard**. But it is the latest Autumn 2009 Savin Controller Architecture technology and increased memory capacities that deliver the enhanced workflow tools, support for the latest operating systems, and airtight security measures. In fact, these improvements in part allowed Savin to actually reduce the clock speed of the CPU from 800 MHz in the Savin CLP131DN to 600 MHz in the new Savin CLP37DN/CLP42DN while increasing output speeds!

Memory

This is one area where the two printers differ in configuration.

The Savin CLP37DN ships with **384 MB RAM** standard. This consists of one fixed 256 MB RAM DIMM and one removable 128 MB RAM DIMM. Customers may add one 256 MB or 512 MB RAM DIMM to boost system memory up to a maximum of **768 MB RAM** to support the constant flow of data streams going to the printer from multiple users, to enable Job and Access Log features, and to allow for legal-size full-color duplex printing at higher resolutions. Upgrading memory in the Savin CLP37DN is also required when adding extended functions via SD Cards such as PictBridge.

The Savin CLP42DN ships with the maximum configurable amount of memory of **768 MB RAM**.

An 80 GB Hard Disk Drive is available as an option for the Savin CLP37DN, but is standard equipment on the Savin CLP42DN. In the event RAM becomes full, additional print jobs are spooled to the Hard Disk where they reside until RAM becomes available. The HDD also serves a multitude of other purposes including:

- Enabling a number of security-related functions such as storing up to 100 Locked Print, Sample Print, Store Print, and/or Hold Print jobs in memory.
- Storage of additional fonts at the device to speed printing and minimize network traffic.
- Storage of SDK software code to run unique workflow applications through the Embedded Software Architecture™. Downloading the code for ESA applications into the HDD frees up an SD card slot for another optional capability, like HDD encryption, for example. (Requires optional RAM).
- Supporting local document archival/print-on-demand needs with the ability to store up to 9,000 pages in memory.
- In the Savin CLP42DN, the Hard Disk Drive is a necessary element for Enhanced Locked Print, as that is where ELP-NX jobs are stored until released by an authenticated user.

Memory Requirements Relative to Resolution, Page Size, & Simplex/Duplex

The amount of installed printer memory, or RAM, directly impacts system performance. This is true of any digital device. Remember, the 80 GB Hard Disk Drive is used to enable functions like job spooling, font storage, and secure printing. Print jobs are actually processed using RAM. The following table outlines the amount of RAM necessary to print one- or two-sided pages at various resolutions **with the Savin CLP37DN**. [The Savin CLP42DN ships with the maximum amount of 768 MB RAM, so it is capable of printing at all modes, sizes, and resolutions.] Remember to investigate typical page sizes and output quality requirements during your sales calls to determine the proper memory configuration to meet customer needs and deliver the best performance.

To print at this resolution…	On this paper size…	Requires this much total memory for Simplex prints…	And this much total memory for Duplex prints…
600 x 600 dpi (1-bit)	Legal (8.5” x 14”) Letter (8.5” x 11”)	384 MB Standard 384 MB Standard	384 MB Standard 384 MB Standard
600 x 600 dpi (2-bit)	Legal (8.5” x 14”) Letter (8.5” x 11”)	384 MB Standard 384 MB Standard	384 MB Standard 384 MB Standard
1200 x 1200 dpi (1-bit)	Legal (8.5” x 14”) Letter (8.5” x 11”)	256 MB + 256 MB = 512 MB 256 MB + 256 MB = 512 MB	256 MB + 512 MB = 768 MB 256 MB + 256 MB = 512 MB

Note: *In busy multi-user environments where several jobs may be sent to the printer simultaneously, configuring the Savin CLP37DN with the 80 GB HDD option is strongly recommended to enable job spooling.*

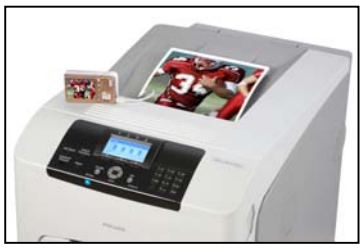
Standard Interfaces

The Savin CLP37DN/CLP42DN is equipped with three (3) standard interfaces:

1. **10-Base-T/100Base-TX Ethernet Interface:** For out-of-the-box network connectivity to support the needs of multiple users (even environments with mixed Mac and Windows computers) simultaneously. Simply connect the printer to the LAN via the RJ-45 port and all authorized users on the network can share the Savin CLP37DN/CLP42DN simultaneously. The printer's **Auto Sensing/Auto Switching** feature automatically recognizes the type of incoming data stream and switches to the appropriate language. Files are transferred at speeds up to 100 Mbps to minimize the potential for network bottlenecks.

2. **USB 2.0 Type B interface:** Provides a direct connection to drive all print jobs through a single PC in peer-to-peer environments, or in shared workgroups where tighter control over device access and printing is desired. The USB 2.0 interface offers data transfer speeds as fast as 480 Mbps for the fast execution of every job. Further, the USB port is backwards compatible with the v1.1 standard (12 Mbps) for use with older PCs.

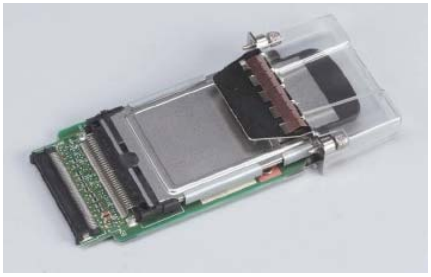
3. **USB 2.0 Type A Interface:** This port allows for direct connection to third party external devices such as a magnetic card reader (pictured, below right) for authentication or user access privileges in secure environments using the Savin CLP42DN and the Enhanced Locked Print function. This port can also be used to connect PictBridge-enabled digital cameras on the Savin CLP37DN/CLP42DN, (pictured, below left). (Requires Camera Direct Print Card). *(See PictBridge in Advanced Printing Features.)*



Optional Interfaces

For greater connectivity flexibility, customers may install one of the following optional interfaces to meet their unique connectivity requirements. Note that the Gigabit Ethernet interface option must be substituted for the standard 10/100BaseTX interface card, but it includes its own USB 2.0 interface.

Option	Customer Benefits
Gigabit Ethernet Type A	
 • Maximum distance between devices is 328 feet (100 meters) for Ethernet, 16 feet (5 meters) for USB 2.0. • Supports 480 Mbps and 12 Mbps speeds for USB connection.	■ Supports today's fastest possible data transfer speed of 1000 Mbps in addition to 10 Mbps and 100 Mbps connectivity. ■ Excellent connectivity solution for environments with large files, such as thousands of host print records. ■ Automatically selects the proper data transfer speed. ■ Disables the standard Ethernet and USB ports, but this board supplies its own USB 2.0 port.
IEEE 1284/ECP Parallel Interface	
 • Provides for direct connection to a PC via a parallel cable. • Maximum distance between devices is 8 feet (2.5 meters).	■ Allows users of older PC technology to connect to current technology via a standard bi-directional parallel interface. ■ Data transmission speeds will be slower, but the availability of the IEEE 1284 interface extends the life of legacy computer hardware while taking advantage of the latest printing solutions.

Option	Customer Benefits
IEEE 802.11a/g Wireless LAN Type L	
 • Supports today's fastest data transfer speeds using the "a" and "g" protocols. • Backwards compatibility with the older "b" standard. • Typical distances for indoor use are between 10 – 100 meters. • Disables the printer's standard 10/100Base-TX port.	■ Provides true printing mobility with immediate cable-free connection for multiple users simultaneously. ■ The IEEE 802.11a/g Wireless LAN interface supports the latest "g" wireless standards and fastest possible data transmission speeds of up to 54 Mbps in addition to backwards compatibility with the older "b" standard. ■ Eliminates the need for cables in offices where adding hard-wired cabling is not possible or cost-prohibitive, such as in older or historic buildings, those featuring brick/stone construction, etc. ■ Allows growing offices to add employees without installing costly network drops. ■ Excellent choice for temporary needs, such as on-site convention/trade show/event printing. ■ WPA-enabled (Wi-Fi Protect Access) to prevent outsiders from intercepting wireless data streams.

Wireless Transmission Standards:

There are three standards for wireless data networking when the printer is connected via the IEEE 802.11a/g Interface. This table outlines the frequency and transmission speeds of each:

Standard	Radio Frequency	Data TX Speeds	Advantage
IEEE 802.11a	5GHz	6/9/12/18/24/36/ 48/54 Mbps	Fastest possible transmission speed supported in US (not all countries support this standard).
IEEE 802.11b	2.4GHz	1/2/5.5/11 Mbps	Older standard for compatibility with legacy wireless PC cards. Relatively slow speeds versus newer standards.
IEEE 802.11g	2.4GHz	1/2/5.5/6/9/11/12/1 8/24/36/48/54 Mbps	Compatible with IEEE 802.11b networks, and supports the faster transmission speed.

Page Description Languages (PDLs), Fonts & Drivers

The Savin CLP37DN/CLP42DN is ready to accept data from connected PCs running any of today's most popular **Windows** and **Macintosh** operating systems.

Savin also provides support for server-based computing environments such as **Citrix,** and older networks running **Novell NetWare**. A **Savin UNIX filter** is also available for host-print environments with ERP, variable data, or transaction printing applications *(see Operating Systems & Network Environments)*.

Page Description Languages (PDLs)

PDLs are sets of rules governing how computers "speak" to printers to describe the appearance and placement of text and graphics on a page. The Savin CLP37DN/CLP42DN controller understands the most popular languages in use today. It also has a simultaneous **Auto Sensing/Auto Switching** capability that allows the device to toggle back and forth between various network protocols and languages of the inbound data streams automatically, so it can support mixed networks (i.e. Windows and Mac) without administrator intervention. The following PDLs are all standard with the Savin CLP37DN/CLP42DN. Supported resolution choices are listed for each language.

Page Description Language	Supported Resolutions
Standard PCL 5c and PCL 6 emulations: **PCL, or Printer Control Language,** is the most commonly used printing language for general office applications today. PCL was invented by HP for use with its' PCs and printers. Over time, this language has been adopted by multiple manufacturers and has become the dominant standard for printing in Windows environments. **PCL 5c** and **PCL 6** are the latest versions, and Savin CLP37DN/CLP42DN support enables the printer to be seamlessly installed into any existing HP/IBM-compatible Windows environment.	**PCL 5c:** 600 x 600 dpi (1 bit) 600 x 600 dpi (2 bit) **PCL 6:** 600 x 600 dpi (1 bit) 600 x 600 dpi (2 bit) 1200 x 1200 dpi (1 bit)
Standard Genuine Adobe® PostScript® 3™ + PDF Direct Print: PS3 is the de facto PDL standard for all desktop publishing applications and high-end graphic workflows. PS3 enables Macintosh and UNIX users with larger file sizes and/or specific image manipulation needs to print to the Savin CLP37DN/CLP42DN with maximum control and image quality. Installed as part of the PostScript 3 PDL, the **PDF Direct Print** feature allows users to print Acrobat pages without launching the software application. PDF Direct Print increases printing speed and minimizes network traffic without impacting image quality.	600 x 600 dpi (1 bit) 600 x 600 dpi (2 bit) 1200 x 1200 dpi (1 bit)

Note: **Effective with the latest version of the Savin Controller Architecture, the Refined Print Command Stream (RPCS), Savin's proprietary PDL and printer driver technology, has been phased out. Most of its functionality has been blended into the supported PCL and new Universal driver versions. The most notable loss in functionality will be the lack of the Unauthorized Copy Control feature.**

Fonts

Fonts are sets of rules that instruct a printer to draw text characters in a specific style. The Savin CLP37DN/CLP42DN reserves space in its memory to store a number of font packages for use with its PCL 5c, PCL 6, and PostScript 3 PDLs and printer drivers. Storing font data at the device speeds printing by eliminating the need for the printer to "reach back" to the sending PC to request the font data to draw each character. The Savin CLP37DN/CLP42DN ships with **136 PostScript 3** and **45 PCL fonts standard**.

Times
Arial
Courier
Script
Century Gothic
Chicago

In addition, all devices employing the Savin Controller Architecture also include a set of **13 International fonts** (Greek, Hebrew, Cyrillic/Russian, Japanese, Arabic, and more) that enable printing in languages using other alphabets – a great solution for multinational companies that need to translate and print documents for publication in local markets across Eastern Europe, Asia, and the Middle East.

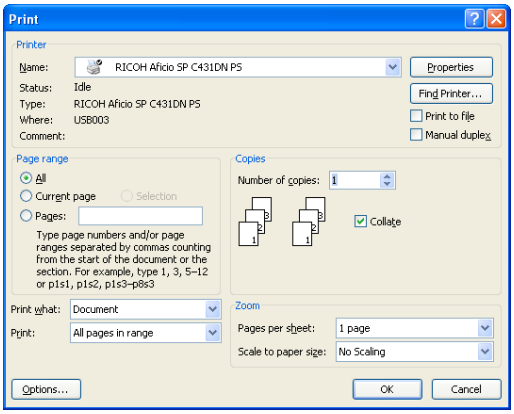
Drivers

Printer drivers are the dialog screens and drop-down windows through which connected users select print commands for each job. Features are usually organized into tabs that group together related functions for job quantity/setup, paper type, image quality, finishing selections (if any), watermarks, and other document characteristics. Thus, the file is delivered exactly how the user desires. Driver screens and available functions may vary based upon the selected PDL and the active network operating system.

Several examples of various PostScript driver screens are pictured on the next page. PCL 5c and PCL 6 driver screens look very similar to the PS3 driver.

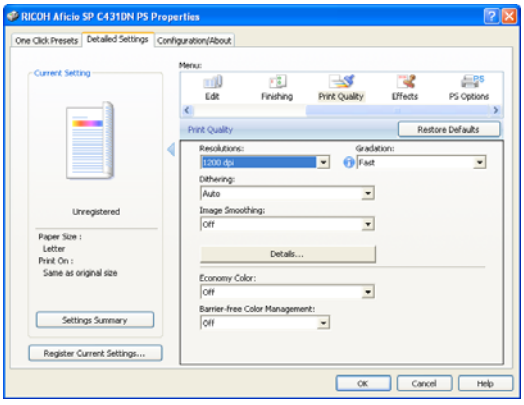
Savin CLP37DN/CLP42DN

Default PS driver screen

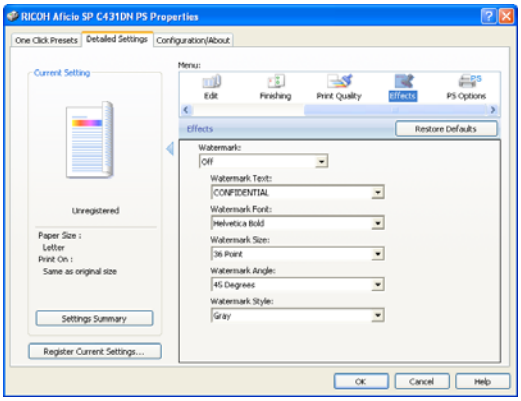


- Set quantities up to 999.
- Choose page ranges and collation.
- Control size/number of pages per sheet.
- Print to file.
- Select Options to access advanced features.

View detailed job settings

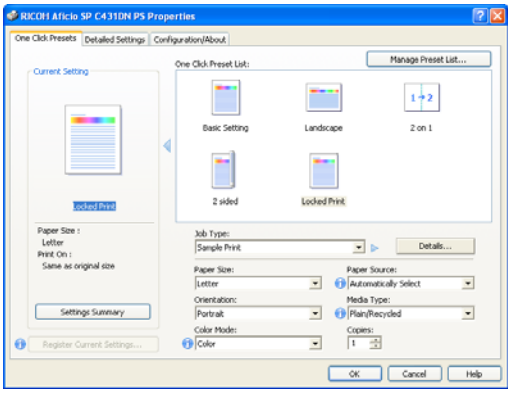


- Set the job type (Normal, Locked, Sample Print, etc.).
- Set a User Code for each job.
- Access advanced settings for print quality and image effects.
- Control print resolutions, smoothing, and dithering.
- Manage paper types, sources, and duplex settings.
- Set color mode, adjust color settings and select color simulation profiles.
- Access Economy Color Mode.
- Change PS printing options.
- Manage watermark content.
- Enable features such as Black Overprint.



Support for Mac OS X 10.6 (Snow Leopard) and Windows 7 is here!!

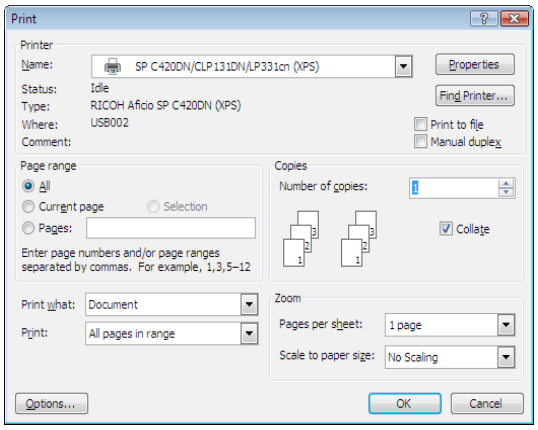
One Click UI Presets



- Save all common printing settings for paper size, orientation, color mode, media type, quantity, and more under a single setting for one click job programming.

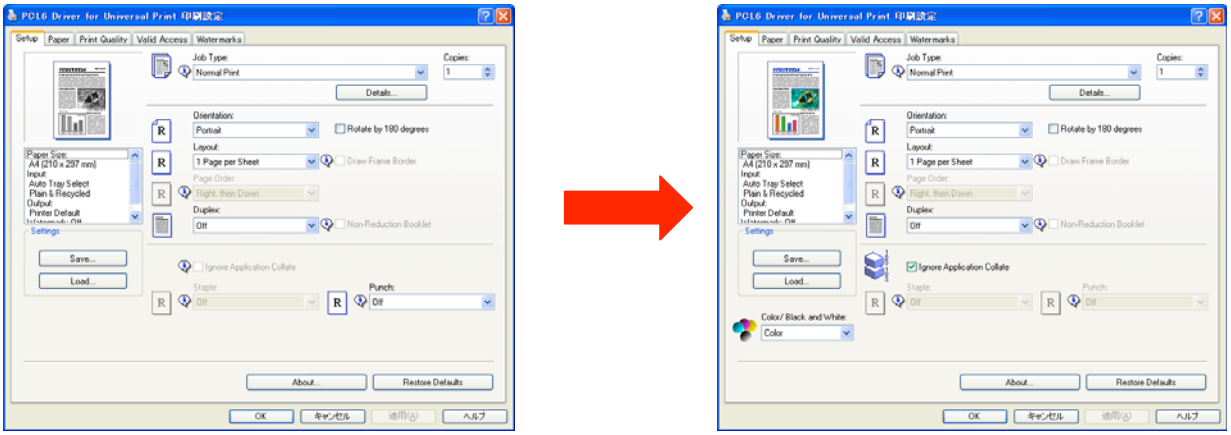
XPS Driver Support

XPS is the name of the driver optimized for computers using the Microsoft Windows Vista operating system. XPS supports resolution levels up to 1200 x 1200 dpi. It offers a look and feel very similar to the other drivers, with added functionality for Vista environments. An XPS document can be used to archive content in a standardized format or publish content in an easily viewable form. This format can also be utilized to ensure that no one is able to edit the original work. With Windows Vista, XPS documents can be easily created from virtually any application using the Microsoft XPS Document Writer and viewed using the XPS Viewer, which is installed by default.



PCL 6 Universal Printer Driver

The Savin CLP37DN/CLP42DN also supports Savin's new Universal Driver technology that can be used to access all Savin MFPs and printers. The Universal Driver will reduce the burden of IT personnel and users by eliminating the need to install machine-specific drivers each time a new printer or MFP is installed on the network.



Universal Driver: When the target device is a color machine, the user interface automatically changes to reflect that machine's capabilities.

When the Savin Universal Driver is loaded onto a machine, it gets device information from the printer MIB via bidirectional communication. If the device is an applicable model, the driver interface will change to the interface of the target device, reflecting its capabilities and options. The user then programs a print job just like any other.

The Universal Driver will be a big time-saver for IT personnel, eliminating the headaches of supporting and upgrading multiple users and devices with the latest driver versions. It is an effective solution for large organizations with a variety of printing devices and large populations of users. For you as a sales rep, the advantage here is that you can easily build a proposal featuring "right-sized" devices that can all be accessed by a single driver and eliminate compatibility issues. For accounts adding to their existing fleet of office equipment, new Savin MFPs and printers can easily be accessed using the same drivers, eliminating end-user learning curves.

Notes:

- *The Universal Driver supports Windows 2000, XP, Vista, 7, Server 2003, Server 2008/R2 and Novell Netware when using the PCL 6 page description language and driver.*
- *The printer must be connected via the Ethernet network interface.*
- *The Universal Driver is available via Web download only and is not included on the CD ROM.*
- *Due to the overlapping functionality with the Mobile Driver, support for that utility will be discontinued effective January 1, 2010.*

Most printer drivers for supported PDLs are included on the Savin CLP37DN/CLP42DN Desktop Color Laser Printer CD ROM. Several updated versions such as the XPS and Universal drivers are available for download from the Savin Website. The following table outlines the wide range of printing features available to connected users when they launch any of the supported printer drivers.

Notes:

- *The Windows Vista (XPS) driver is **not** included on the CD, but its functionality is included in the following table.*
- *The Savin CLP37DN/CLP42DN **is** certified for use with Windows 7. However, specifics on driver feature support are not available at the time of publication and are not included on the following table.*

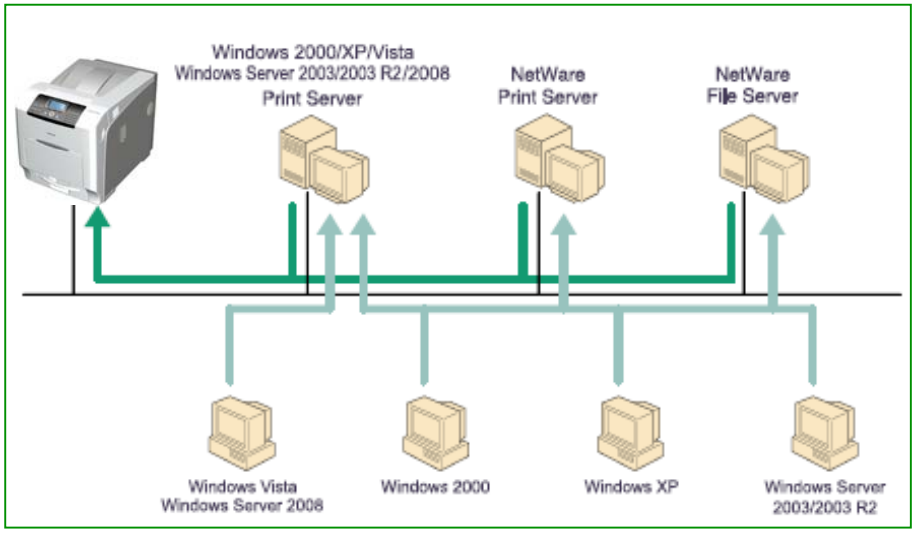
Available Print Functions By Driver

Driver Feature	PCL 5c / PCL 6	PostScript			XPS
		Windows 2000/XP/Vista	Mac OS 8.6+	Mac OS X 10.2+	
Job Binding	No	No	No	No	No
Send to Document Server	No	No	No	No	No
Sample Print	Yes[4]	Yes[4]	Yes[4]	Yes[4,5]	Yes[4]
Locked Print	Yes[4]	Yes[4]	Yes[4]	Yes[4,5]	Yes[4]
Hold Print	Yes[4]	Yes[4]	Yes[4]	Yes[4,5]	Yes[4]
Stored Print	Yes[4]	Yes[4]	Yes[4]	Yes[4,5]	Yes[4]
Stored Print (Shared)	Yes[4]	No	No	No	No
Stored & Normal Print	Yes[4]	Yes[4]	Yes[4]	Yes[4,5]	Yes[4]
Stored & Normal Print (Shared)	Yes[4]	No	No	No	No
Reduce/Enlarge (Scaling)	No	Yes	Yes	Yes	Yes
Reduce/Enlarge Centering	Yes	No	No	No	No
Collate	Yes[3]	Yes[3]	Yes[3]	Yes[3]	Yes[3]
Custom Media Type	Yes	No	No	No	No
Layout (N-up)	Yes	Yes	Yes	Yes	Yes
Poster	No	No	Yes	No	No
Duplex	Yes	Yes	Yes	Yes	Yes
Front Cover Sheet	Yes	No	Yes[1]	Yes[1]	No
Front and Back Cover Sheets	No	No	No	No	No
Slip Sheet	Yes	No	No	No	Yes
Chaptering (Page Layout)	No	No	No	No	No
Chaptering (Single Page Insert)	No	No	No	No	No
Chaptering (Page Block Insert)	No	No	No	No	No
Tab Stock Printing	No	No	No	No	No
User Defined Pages	(Yes PCL 5c)	No	No	No	No
Mirror Image Print	No	Yes	Yes	No	No
Negative Image Print	No	No	No	No	No
Dithering	Yes	Yes	Yes	Yes	No
Edge Smoothing	No	No	No	No	No
Toner Saving	No	No	No	No	Yes
Economy Color	Yes (PCL 6)	Yes	Yes	Yes	--
Watermark	Yes	Yes[2]	Yes	Yes[2]	No
Form Overlay	No	No	No	No	No
Header/Footer	No	No	No	No	No
Adjust Image Position	No	No	No	No	No
Binding Margins	No	No	No	No	No
User ID	Yes	Yes	Yes	Yes[5]	Yes
User Code	Yes	Yes	Yes	Yes[5]	Yes
Billing Code	Yes	No	No	No	No
Rotate Print	Yes	Yes	No	No	Yes
Reverse Order Print	No	Yes	Yes	Yes	Yes
Do Not Print Blank Pages	No	No	No	No	No
Edge to Edge Print	Yes[6]	Yes[6]	Yes[6]	Yes[6]	No

Note: Edge to Edge Print is not equivalent to a full-bleed function.

1: Same as FirstPage/OtherPage feature.
2: Custom "Watermark Name" is not available.
3: HDD or optional memory required.
4: HDD is required.
5: Supported by Mac OS X 10.2.x or later.
6: Supported only with driver and controller

Operating Systems & Network Environments



In addition to languages that describe page content, driver screens, and font appearance, there are also rules that govern how data is transferred back and forth between different kinds of PCs and network servers, peripherals, MFPs, and printers. In order for a customer's PC to communicate with another connected device, both must support the same set of data communication rules or protocols. The versatile Savin CLP37DN/CLP42DN printer supports the various computing platforms and operating systems common to general office environments to ensure that all connected users can access it with plug-and-play simplicity. Supported "front office" operating systems include:

- **Windows 2000, XP, Vista, 7, Server 2003/2003-R2, Server 2008**
- **Mac Classic OS 8.6 – 9.2.x**
- **Mac OS X 10.2+**

"Front office" is a term that refers to typical general office printing applications – the kind of jobs you see corporate employees and office workers printing from their Windows or Mac computers to a desktop or shared workgroup printer. These are usually Microsoft Office, PDF, and E-mail/Web page printing applications. Windows and Mac users simply connect the networking cables and download the appropriate printer driver to their PC/Mac from the Savin CLP37DN/CLP42DN CD-ROM to begin printing.

The Savin CLP37DN/CLP42DN also supports **Novell NetWare**. NetWare was a popular network operating system first developed for simple file sharing applications in the 1980s. It has since evolved into today's Open Enterprise Server (OES). NetWare's basic functionality has been superceded by the more efficient and user-friendly TCP/IP network protocol. However, because some legacy networks still run older versions of NetWare, Savin provides support for this OS via the optional SD Card for NetWare Printing.

For larger environments and national accounts or fleet sales, the Savin CLP37DN/CLP42DN also supports Citrix Presentation Server and the Savin UNIX Filter that will allow it to serve in "line of business" applications as well, thereby adding more value to your solution.

Citrix Presentation Server Support

Citrix Presentation Server (previously called MetaFrame) is a server-based computing standard that is very popular in enterprise-class environments. It runs "on top of" Windows 2000, Windows Server 2003, and Windows Server 2008. It allows IT administrators to install and control access to software from a central server. Applications are not loaded onto individual PCs; rather they are stored on a server and presented to individual users when they launch the application on their networked computer. This contributes to data security and greatly relieves IT personnel of the burden of installing/updating software on individual devices. However, this computing model has a major limitation in that Citrix users cannot execute many of the advanced printing features of connected devices like duplexing, access additional paper sources, or print documents stored on the hard disk drive; issues similar to those discussed in the UNIX example below.

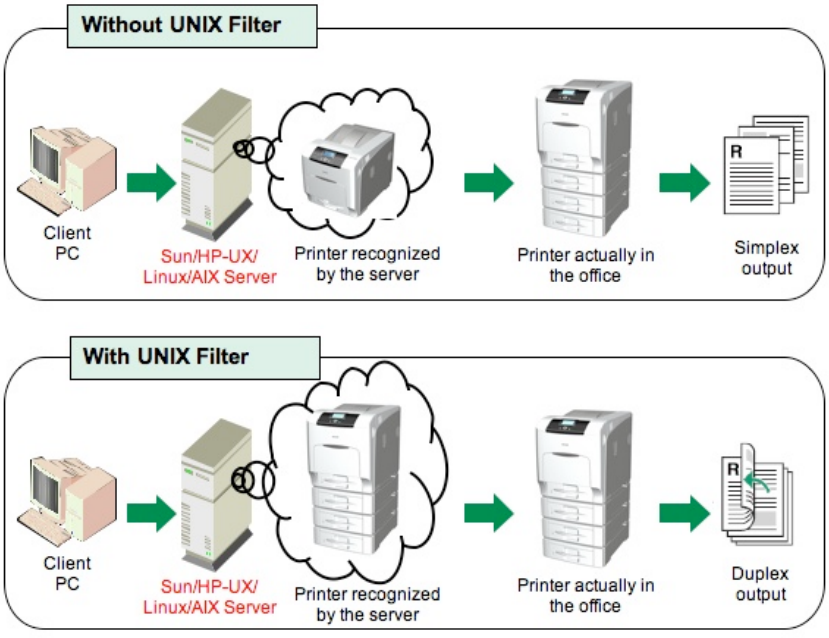
To resolve this problem and allow Savin devices to be installed in Citrix MetaFrame/Citrix Presentation Server environments, Savin has developed the **Device Option Utility for Citrix** that allows Citrix users to discover and access all available printer features, thus making the Savin CLP37DN/CLP42DN a viable option for distributed environments and global accounts with color output needs.

The Citrix Device Option utility can be downloaded for free at **http://www.savin.com/downloads.**

Savin UNIX Filter Support

Whereas Microsoft Windows (and to a lesser extent, Macintosh OS X) dominates the client or "front office" OS market, UNIX and Linux solutions are widely accepted in server-based OS "back office" or "line of business" (non-Windows) applications. Therefore, the Savin CLP37DN/CLP42DN supports the **Savin UNIX Filter Phase 11** that allows the printer to be placed into host print environments, thereby expanding your sales opportunities. The Savin UNIX Filter supports many "flavors" of UNIX, enabling enterprise-class mainframe computers to take advantage of cut-sheet, plain paper color laser printing with complete access to image and document manipulation features such as duplexing and finishing (if available).

The Savin UNIX Filter is the missing link between legacy computer languages and today's more efficient laser printing technologies. As illustrated in this host print workflow example, without this filter the UNIX system may still be able to print to the target device, but any advanced features available to users through the driver would not be supported. The Savin UNIX Filter allows the host system to “see” the duplexing capabilities and optional paper supplies of the Savin CLP37DN/CLP42DN.



Driving print volumes to the latest laser printers instead of older, noisy dot matrix line printers will allow host print customers to save money, increase print speed and productivity, as well as produce output of equal quality to other areas of the enterprise. The Savin UNIX Filter is available for the environments listed here. Cut and paste this URL into your browser to download them for free: **http://www.savin.com/downloads**

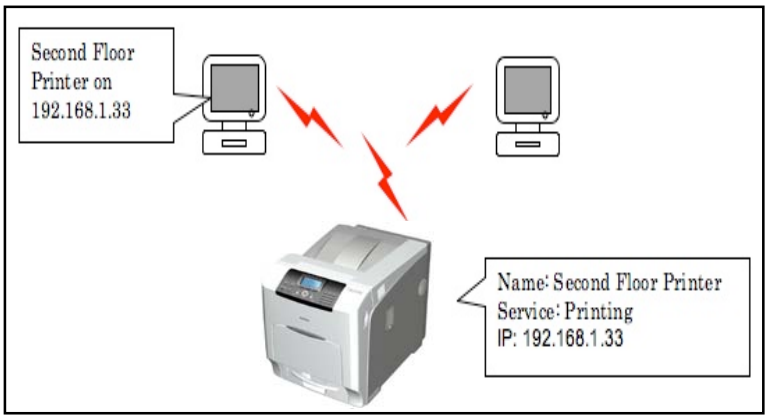
Supported UNIX Platforms
Sun Solaris 2.6, 7, 8, 9, 10
HP-UX 10.x, 11.x, 11i v2
Red Hat Linux 6.x, 7.x, 8.x, 9.x, Enterprise
SCO Open Server 5.0.7, 6.0
IBM AIX V4.3, 5L V5.1, 5L V5.2, 5L V5.3

CAUTION: Just because the Savin CLP37DN/CLP42DN supports these environments doesn't mean it should be used exclusively for line of business printing. UNIX/Linux support is provided to increase system versatility and the value of your solution by handling short runs and serving as a back-up device. If host printing is a sizable application for your prospect, consider recommending a higher volume solution.

Advanced Networking Features

In addition to support for Gigabit Ethernet and the latest wireless standards *(See Controller, Memory & Interfaces)*, the Savin CLP37DN/CLP42DN also offers a number of capabilities to further ease device installation, monitoring, and management:

Bonjour Support

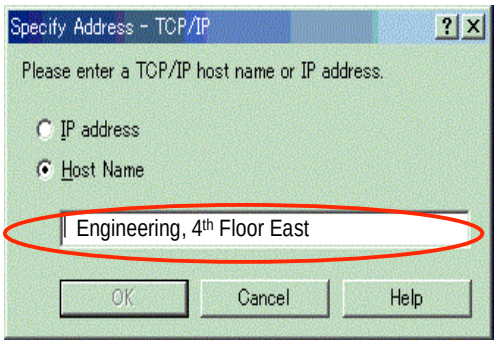


Bonjour, (formerly called *Rendezvous,* Apple's version of Zero Configuration Networking), is a standard set of discovery protocols for Mac. It enables a networked device to automatically allocate IP addresses, recognize, and connect with other devices on the network, minimizing IT burdens for customers. Bonjour uses Internet Engineering Task Force (IETF) standards for both Link Local Addressing (LLA) and Multicast DNS (mDNS) to ensure compatibility. LLA "looks around the network", negotiates with other devices on the subnet, and picks a suitable IP address for the device. Once registered, mDNS allows the new device to advertise its existence on the network and the services it offers to connected users.

To your customers, Bonjour means that when the printer is installed every computer on the network is able to find and use it instantly without any manual setup or special configuration necessary at each workstation. Further, Bonjour allows the use of names rather than IP addresses to make device identification/location easier.

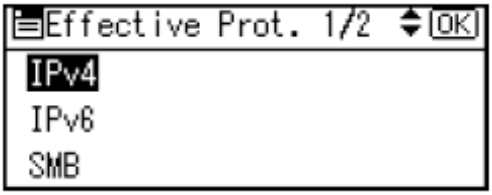
Dynamic Domain Name System (DDNS) support

With Dynamic DNS, every Savin CLP37DN/CLP42DN IP address and host name are automatically updated each time a device is powered up. If the IP address is changed for any reason, such as a power outage or if the unit is accidentally unplugged, a connected PC will always be able to find the printer's location on the network.



IPv6 Support

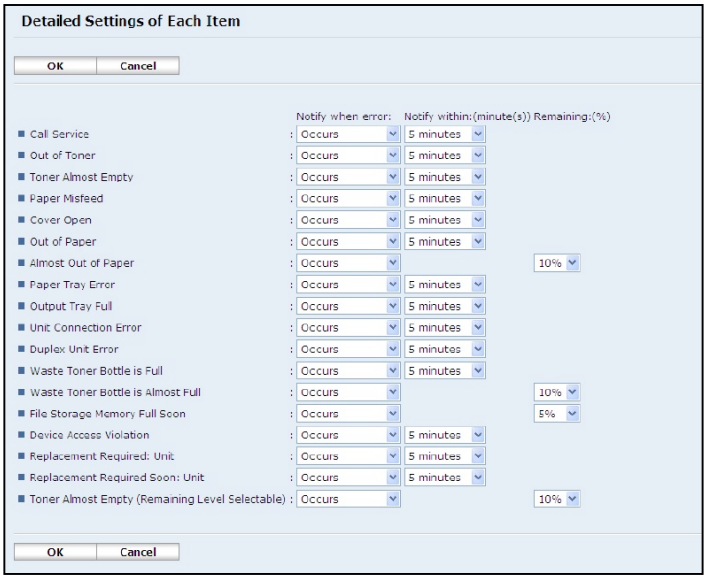
Internet Protocol Version 6 (IPv6) is the next generation Internet protocol designed by the IETF to replace the current version, IP Version 4 (IPv4). IPv6 adds many improvements to IPv4 in areas such as routing and network auto-configuration to simplify device identification and discovery.



Still not sure what this means? It doesn't really matter; your customer's IT personnel will understand. All you really need to communicate is that your Savin CLP37DN/CLP42DN supports both the IPv4 and IPv6 protocols!
Note: NetWare users must set this feature to IPv4.

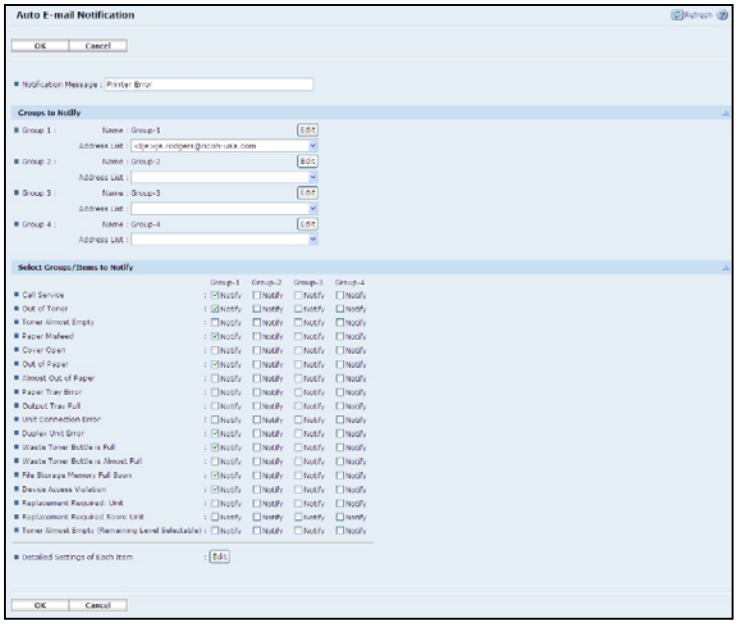
Remote Operation Panel

Through Savin's Web Image Monitor (WIM) utility administrators can reset the current job, delete passwords and print jobs, or reboot the device from anywhere on the network in the event a user cannot resolve a problem directly. Access to dozens of system parameters such as paper supplies, user authentication, E-mail notifications, PDL and font settings, network security selections, and more provide total remote device management, so that administrators spend more time at their desks rather than visiting printers, MFPs, and workstations to correct minor problems. *(See Bundled Software Utilities.)*



Auto E-mail Notification

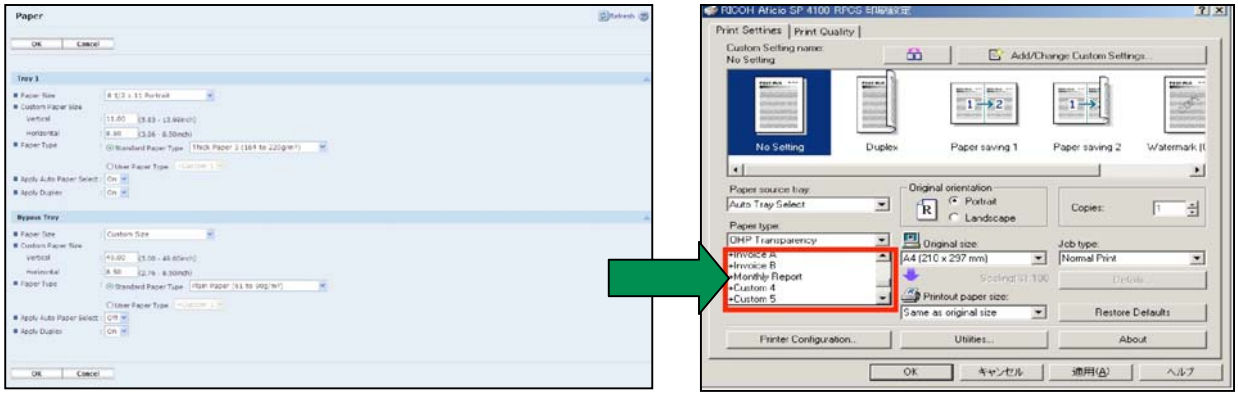
Another proactive communication feature delivered through Web Image Monitor is the ability to notify selected administrators via E-mail in the event of "Toner Almost Empty", "Out of Toner", "Call Service", "Cover Open", or "Paper Tray Error" conditions, for example. Users can set the system to notify administrators when an error occurs, or within a specified time period (between 0 – 30 minutes).



The system can also be set to inform personnel when consumables are approaching end of life to allow for proactive maintenance. Each E-mail contains the exact network address and device name so the administrator can immediately begin error/fault correction.

Windows Active Directory Support – Paper Size Setting

For users running Windows 2000, XP, or Vista, this function allows administrators to remotely access and change device settings for the paper size located in each tray that is presented to connected users when using the PCL driver. It also allows the administrator to name the media type in each tray so that the end-user can easily identify the paper in each source, such as Invoice, Quote, or Monthly Report.



Advanced Printing Features

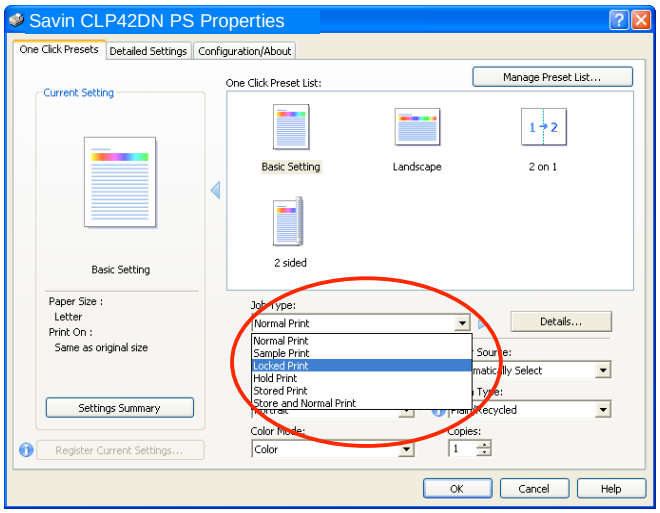
The Savin CLP37DN/CLP42DN also provides a number of advanced printing features through its next-generation Savin Controller Architecture that add even more value to your solution. The following section highlights some of the more advanced Savin CLP37DN/CLP42DN printing capabilities in addition to the usual print features listed in the Printer Driver Features table. Please see the operator manual or your sales manager for additional information.

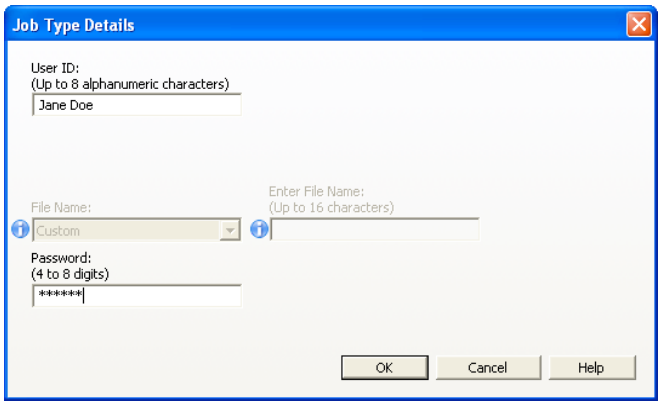
Sample/Locked/Hold/Stored/Store & Print Modes

This cluster of five modes enhances productivity, security, and confidentiality when the printer is equipped with the 80 GB Hard Disk Drive. That means these modes are **standard on the CLP42DN, and optional on the CLP37DN**. Also please note this Locked Print function is different from the Enhanced Locked Print (ELP-NX) function that is part of the CLP42DN feature set. *(See Security: Device Access & Data Protection.)*

Sample Print	Outputs a single set before committing the system to a lengthy print job that could result in errors and waste. If the sample set is acceptable, the user can release the balance of the print job; if changes are required the job can be modified or deleted.
Locked Print	A confidentiality feature that will only release the print job from memory after the author enters a 4 – 8 digit password at the device control panel. The print data is deleted immediately after printing for increased security.
Hold Print	A convenient means to minimize trips to the printer. Users can place print jobs sent to the device throughout the day in a Hold queue, and then print all pages at once to avoid having their documents mixed with other users' pages. This mode does not require a password.
Stored Print	Enables print-on-demand capabilities by sending the file to the optional hard disk drive for storage and later printing/reprinting. Password protection may or may not be activated at the user's discretion.
Store & Print	This mode instructs the printer to output one set of hardcopy while storing the data in the optional HDD in a single operation, saving time by minimizing repetitive steps.
Stored Print – Shared **Store & Print – Shared**	Recent enhancements to these modes include "Shared" modes for Stored Print and Store & Print. When activated, the "Shared" feature limits file access to authenticated users.

For all of these modes **up to 9,000 pages, or a total of 100 jobs**, can be stored in the 80 GB HDD. The desired mode is selected by checking the appropriate command in the active print driver (Circled). Files can be printed and deleted individually, or all at once, and passwords may be assigned to files. Data is saved in memory even when the power to the device is turned off.





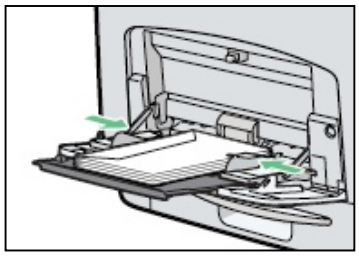
The table below outlines the primary specifications for each mode:

Job Type	Total Stored File Capacity	Data Saved when Power Off	Password for Files	Re-printing	Multi-file Print/Delete in One Operation
Sample Print		**YES**	**NO**	**NO**	**YES**
Locked Print		**YES**	**REQUIRED (4 - 8 digits)**	**NO**	**YES**
Hold Print	**100***	**YES**	**NO**	**NO**	**YES**
Stored Print		**YES**	**REQUIRED (4 - 8 digits)**	**YES**	**YES**
Store & Print		**YES**	**REQUIRED (4 - 8 digits)**	**YES**	**YES**

**Total Stored File Capacity means total amount of files of all job types.*

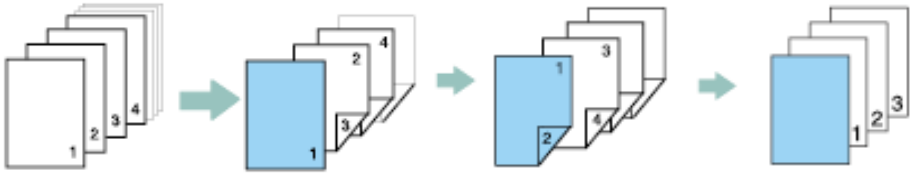
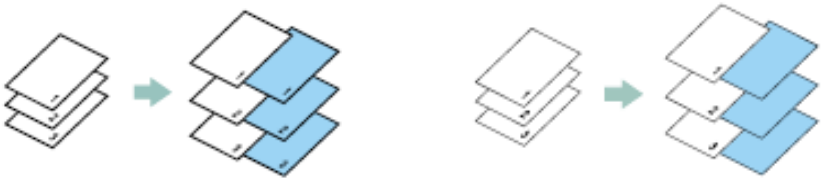
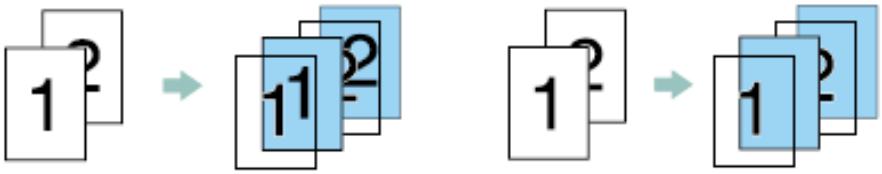
Paper Selection Features

These modes make media selection easier and system operation more productive.

Auto Tray Select	Allows the user to determine the default paper tray (called the Priority Tray) for each job.
Auto Tray Change	Permits the printer to search for another paper source loaded with the same size/type paper as the media selected for the current job. When the first tray is depleted, the printer will switch to another source. This provides a limitless paper supply, as users can refill one source while the printer is pulling from another for uninterrupted operation
Tray Lock	This mode allows users to set which trays can be accessed or blocked for Auto Tray Select and Auto Tray Change functions.
Sub Paper Size Setting	This mode instructs the printer to substitute Letter size paper for A4 size paper in the event an A4 print job was sent to the device and that paper size is not available, keeping the job pipeline moving.
Print from the Bypass without inputting "paper size" in the Bypass setting	 In the new Savin CLP37DN/CLP42DN, customers also have the capability to determine whether to set paper size by Driver Command or Machine Setting. Past models only made this option available to the Bypass Tray. This feature is now open to all installed Trays. Coupled with enabling the Auto Tray Select feature for all trays, this really simplifies the process of setting paper size. In the past, customers had to set Paper Size both at the Driver and on the Machine in order to avoid a paper size mis-match. Now, when the customer selects a Paper Source of "Auto Tray Select" in the Driver, the printer searches all available Trays to find the Tray with the same Paper Size setting as the document. If none of the Trays have the same size, the printer next looks at the Bypass Tray. If the Bypass Tray is set for Any Size/Type, the job is printed using paper in the Bypass Tray.

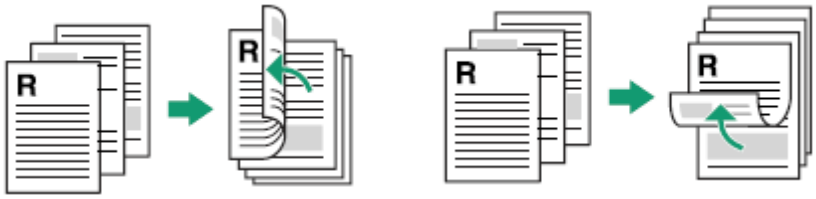
Collation, Covers, Slip Sheets, and Transparency Printing

These modes assist with the production of professional looking document sets, and increase user productivity when using multiple types of media in one job.

Collate	Print individual multi-page document sets in page order. Each set will be completed in its entirety up to the programmed quantity. Up to 150 pages can be stored in printer RAM for collation. If the HDD is available, up to 1,000 pages can be stored for collation.
Cover Sheets	Add front covers to printed sets. The cover page is pulled from a different paper source than the one identified for the body pages. The cover may be printed on one side, or both sides, or left blank. 
Slip Sheets	Places the user's choice of blank or imaged pages between each printed page. 
Transparency Printing	Places the user's choice of blank or imaged pages between each page of overhead transparency stock. This improves handling, reduces the buildup of static electricity, and is an easy way to create a proof or handout master set in one operation. 

Duplexing, Booklet & N-Up Printing

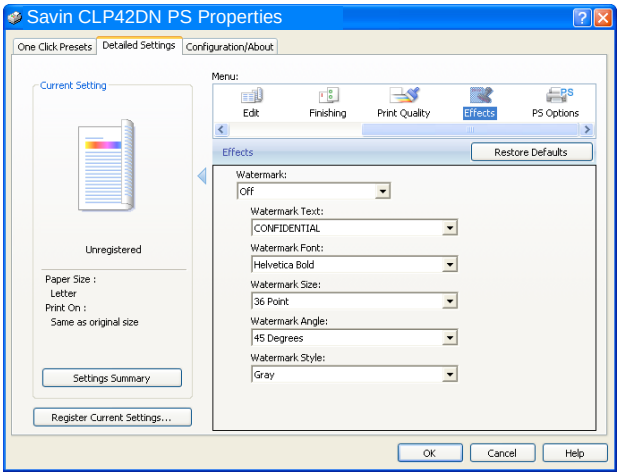
These modes help users save paper, postage expenses, and filing space by placing multiple images onto a single sheet of paper.

Duplex Printing	Print onto both sides of the paper. Select **Long Edge** (open to the left) for output used in conventional printing like a book or magazine. Select **Short Edge** (open to the top) to produce a document in a calendar fashion. 
Booklet Printing	Reorders the page data from sent files to produce duplexed documents in reader spreads. The printer reduces and places multiple pages on each sheet. Users also have the choice of Top or Left orientation.
N-Up Printing	Combines multiple pages onto a single sheet of paper. Image size is reduced to fit 2 or 4 pages per sheet. Users have control over the page orientation as well as the order of pages on each sheet. **2 Pages Per Sheet** **4 Pages Per Sheet**

Watermarks

The Watermark feature allows users to **print light text over existing content**. Users can add watermarks to documents for distribution tracking, versioning, or confidentiality purposes.

Users can choose the type style (Outlined, Solid, Transparent Text), font size, angle, density, and message content to appear on the first page or all pages of the set (Confidential, Copy, Draft, Final, File Copy, Proof, etc.).



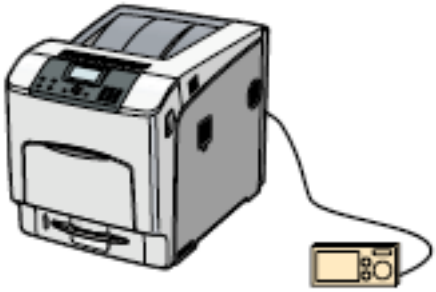
Spool Printing (Requires HDD)

Spool printing allows print job data sent from a computer to be temporarily stored in the Hard Disk Drive. The printer outputs the document only after the entire file has been transferred. This is especially useful when printing large files. Spool printing speeds printing by eliminating the delays caused when large files are sent in sections to the printer to avoid memory overflow. Spool printing also reduces data traffic by pulling an entire job off the network. Spooled jobs can be viewed or deleted from printer memory using Web Image Monitor.

Virtual Printers (Requires HDD)

The Savin CLP37DN/CLP42DN supports up to 50 Virtual Printers. A virtual printer is a pseudo printer that can only be recognized on a network. The virtual printer has various print options, such as feeding tray selection, color mode, and duplex printing, which users set in advance. When a print job fitting those parameters is required, the user simply selects the appropriate virtual printer that matches those settings and jobs are output without further manual programming, eliminating guesswork and speeding workflows of common jobs. Virtual printer settings are made by system administrators. This feature will be of interest to accounts using UNIX, Sun Solaris, and other host print workflows.

PictBridge: Direct Digital Camera Connectivity



Required options:

- **Camera Direct Print Card Type H**
- **A PictBridge-enabled digital camera**

The standard USB 2.0 Type A interface on the Savin CLP37DN/CLP42DN can be used to connect a PictBridge-enabled digital camera directly to the printer, bypassing the need to process photographic images through a connected PC.

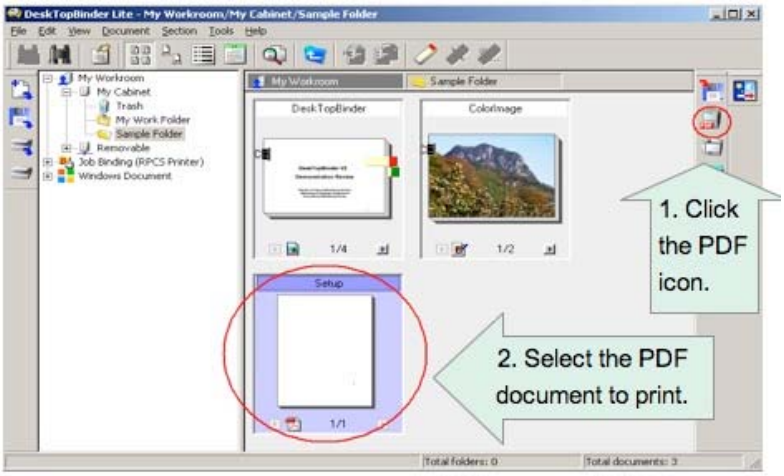
When configured with the Camera Direct Print Card, an option that is installed via an SD card, your customers can connect their digital still cameras directly to the printer. PictBridge is the industry standard for connecting digital cameras to a printer or MFP. No software is required regardless of camera brand. Printing is controlled via the LCD control panel of the connected camera, making it easier than ever to print hardcopy images. This is a convenient feature for customers with photo-intensive applications like insurance claims, real estate, construction, product testing, and law enforcement.

Up to **999 pictures** can be sent from a PictBridge-compliant digital still camera to the Savin CLP37DN/CLP42DN in a single operation (depending upon card and file sizes). Some printing conditions will be a function of the capabilities of the connected camera, but PictBridge allows for advanced photo printing functions such as:

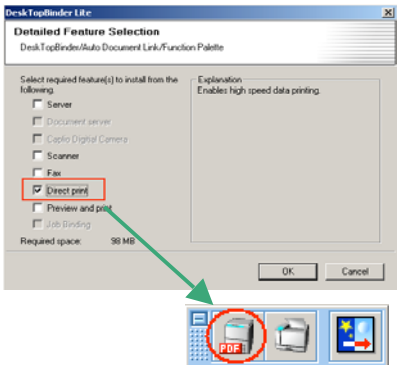
- **Single image print** (Print one selected image)
- **Selected image print** (Print multiple selected images)
- **Index printing** (Thumbnails of all images)
- **All image printing** (Prints all images on the card)
- **N-up layout print** (Single sheet with multiple images)
- **Image trimming** (Print inside image area only)
- **Date and file name printing** (Add date and name to photos)
- **Paper size** (Print on the selected paper size)
- **Image print size** (Print at desired image size)
- **Image quality** (600 x 600 dpi or 1200 x 1200 dpi)
- **Form printing** (With rules around each image)

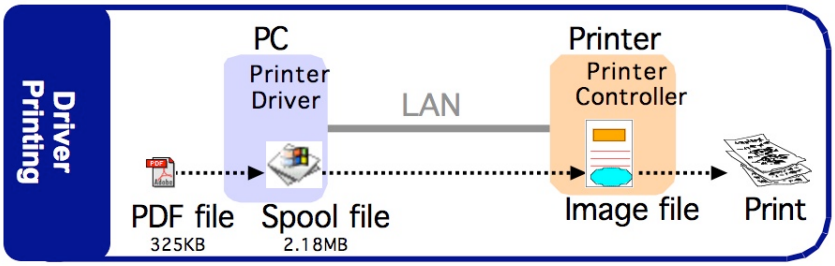
PDF Direct Print (Portable Document Format) Support

The Savin CLP37DN/CLP42DN supports the PDF Direct Print function. This feature enables the printer to receive and then print a PDF file directly from a PC without launching Adobe Acrobat or spooling a print job on the host PC.



PDF is popular because it offers consistent document appearance on all platforms and retains a compact file format. It's like taking a snapshot of a larger graphic file. However, when users print a PDF file from their PC, it must first spool on their system. When a PDF file is converted to printable data, file size increases significantly; for example, a 325KB PDF file expands to 2.2MB file when printed through the Windows printer driver. When PDF Direct Print is used, the file is output with the same image quality, but the file size never expands beyond the compressed 325KB PDF file size, minimizing network traffic and speeding file processing.





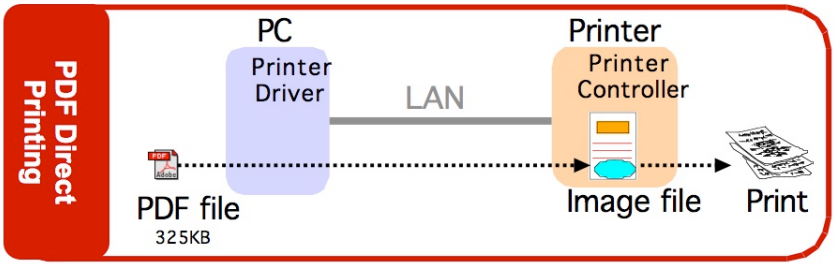
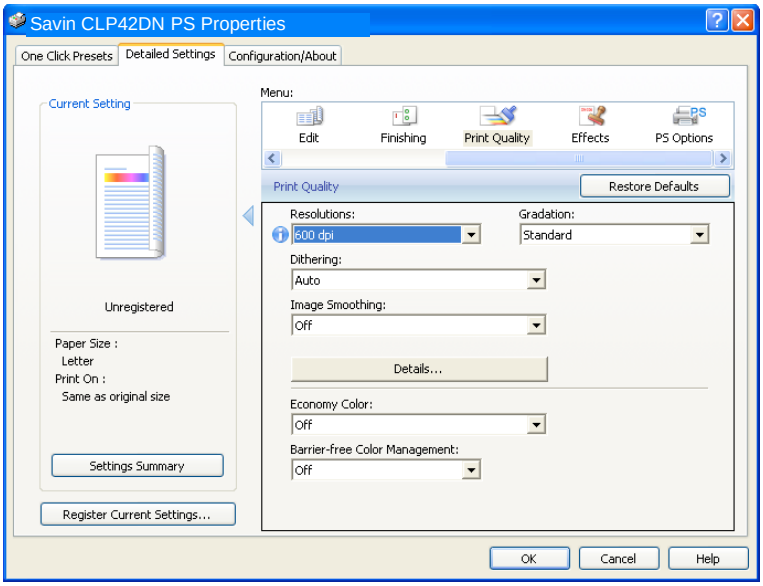


Image Quality & Color Simulation Features

For creative users requiring color accuracy in their output, the Savin CLP37DN/CLP42DN supports a number of image enhancement and color simulation standards to ensure color output matches the desired outcome for quality and/or proofing purposes.

High Resolution up to 1200 x 1200 dpi

The Savin CLP37DN/CLP42DN delivers superior image quality at full rated engine speeds of 37-ppm or 42-ppm for both full-color and black & white pages (Letter) at resolutions of 600 x 600 dpi (1-bit/Fast mode) and 600 x 600 dpi (2-bit/Standard Mode). The 600 x 600 dpi (2-bit/Standard) setting is the default quality mode for the printer.

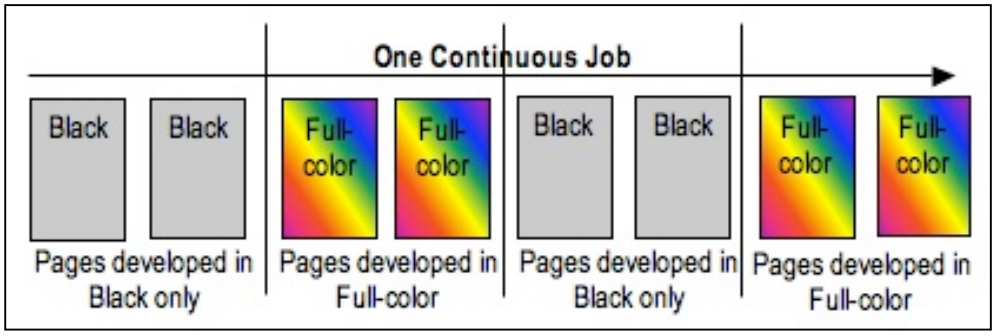


The Savin CLP37DN/CLP42DN is also capable of printing at an enhanced resolution of true 1200 x 1200 dpi (1-bit) mode for documents requiring the highest level of image quality.

***Note:** 1200 x 1200 dpi printing reduces output speed to about 15-ppm (Letter) for both engines in simplex and duplex print modes. This is due to the additional data processing load.*

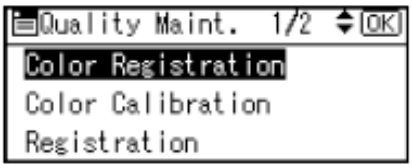
B&W Page Detect

Within the System Menu users can select the B&W Page Detect function. Also known as Auto Color Sensing (ACS), when black or monochrome output is selected only the appropriate toner cartridges and photoconductor units are engaged, conserving supplies and creating prints at the lowest possible cost-per-page. This feature automatically switches back and forth between the proper imaging units for mixed color and monochrome pages within the same job.



Color Registration/Calibration/Print Position Adjustment

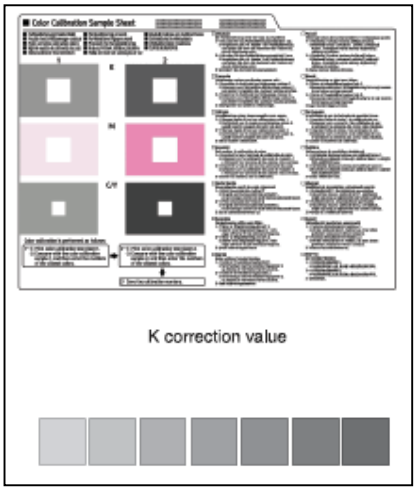
The Savin CLP37DN/CLP42DN offers several maintenance modes to ensure maximum image quality. Some of these settings are performed automatically at predetermined intervals, and can also be easily initiated by walk-up users at any time:



- **Color Registration Adjustment:** After moving the printer, printing onto thick stocks, or printing a very long job, some color degradation may occur. Select Auto Adjust under Color Registration to return the printer to optimal quality conditions.

- **Color Gradation/Calibration Correction:** Color gradation and density can shift slightly over the course of time due to changes in temperature, humidity, or if a toner color was recently replaced. Users can print a calibration sample sheet to check image quality against default values and then adjust each color.

- **Print Position Adjustment:** Users can shift the print position of the image on the page along the horizontal axis to ensure content is centered on the page. This function may be required occasionally when an optional Paper Feed Unit is installed.



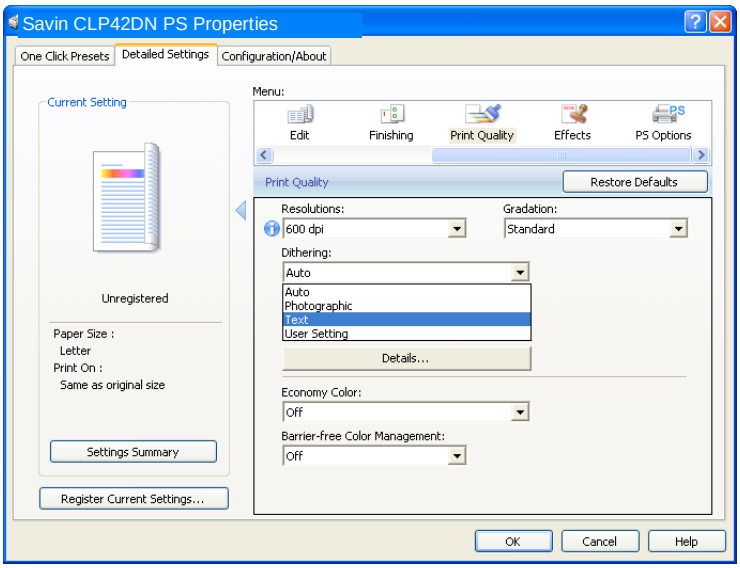
Media Optimization

Within the printer driver users can select the type of media for each job. Depending upon the type/weight/finish selected, the printer may adjust its speed and features to provide optimal image quality. For example, the printer will slow down to allow for more fusing time when printing onto coated stocks, and disable duplexing when printing onto label sheets. Users can choose from the following media types:

- Plain Paper
- Letterhead
- Coated Paper (Glossy)
- Coated Paper (Glossy: Thick)
- Coated Paper (Matted)
- Coated Paper (Matted: Thick)
- Waterproof Paper
- Label Paper
- Envelope

Dithering

Dithering refers to the pattern or angle in which dots are placed on the drum and paper to create an image. Different patterns are used for text or photographic images. This impacts the quality of the print. When printing text, a dithering pattern is selected that places the dots in a straight line to provide crisp text and fine lines (left). When printing photos or color charts, a pattern is selected that places dots at varying angles to present to the human eye the illusion of continuous tones and smooth gradations (right).



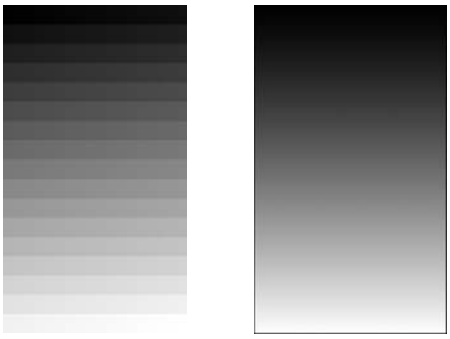
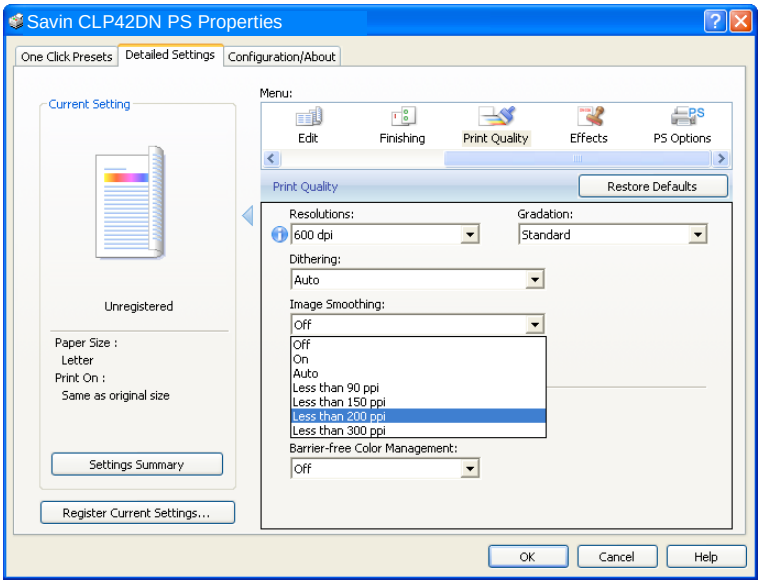


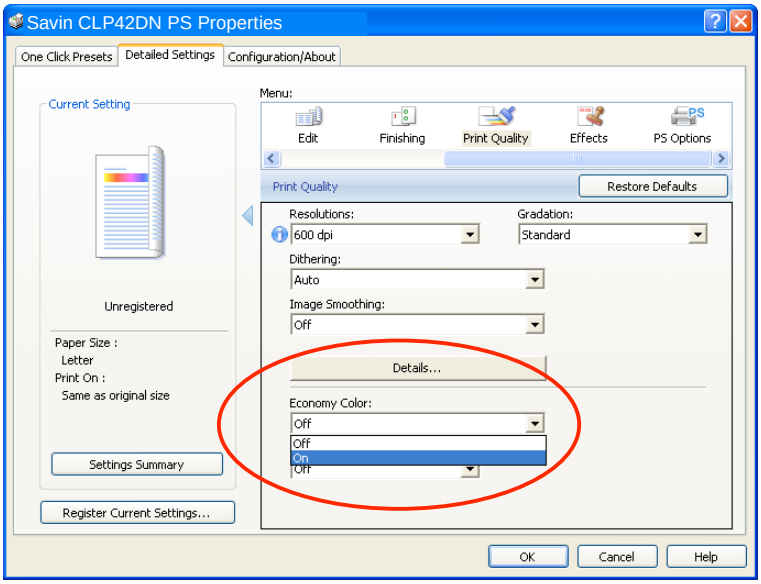
Image Smoothing

This function boosts image quality for elements on the page that were initially drawn at a lower resolution. In addition to Off, On, and Auto Smoothing modes, users can select the ppi (pixels per inch) threshold for which Smoothing is activated.



Economy Color

Not every page requires "presentation image quality". Document drafts destined for edits, internal review (like this SIG in manuscript form), or pages using spot color to highlight training information do not need the same amount of color density as a client proposal or brochure to serve their purpose. Recognizing this, the Savin CLP37DN/CLP42DN offers an **Economy Color Mode.** Selectable through the printer driver, this mode is separate from the other Print Quality settings, but it is much more than a draft mode offered by other inkjet or laser printers.



Economy Color Mode automatically reduces the amount of toner used to print graphic images while maintaining normal density for text characters (text in any color, not just black). The result is clear, easy-to-read text combined with eye-catching color at a cost-per-print that is about half that of a full-color print, and sometimes even less.

Full-color print

Economy Color print

How do Savin printers "know" when and where to reduce toner density? One of the characteristics of the Windows operating system is that it divides data on a page to be printed into three groups, "Text", "Graphic", and "Image" regardless of color. When the user checks the Economy Color Mode box, the Savin CLP37DN/CLP42DN automatically reduces the amount of toner used to create elements that appear to the Windows OS as a "Graphic" or "Image" by about 50% as compared to a Standard or High Quality print mode. But the density of text remains at 100% in order to meet the requirements of business users for clear, legible text – a notable advantage over printers that offer a "Draft" mode in which image density is decreased across all elements on the page.

Barrier-Free Color Management

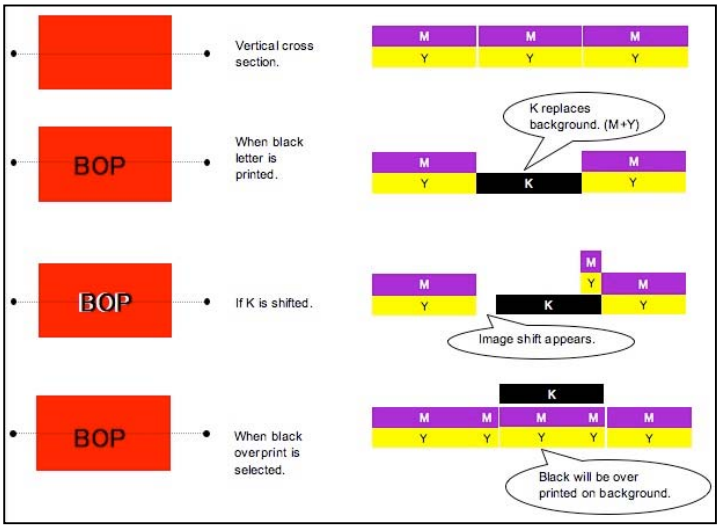
When activated, this mode adjusts colors on the printed page so that colorblind people can more easily distinguish colors on photographs and sections of pie charts, for example. Barrier-free Color Management is available in the PCL 6 and PostScript drivers.

Gray Reproduction

Another mode to enhance image quality in the Savin CLP37DN/CLP42DN, this mode controls whether text and line art are printed in true black or by creating a process black from all four toner colors.

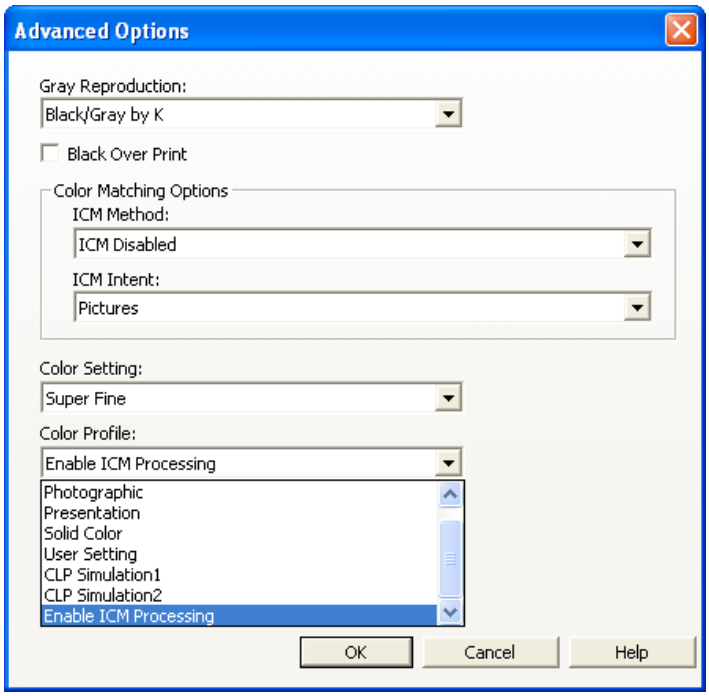
Black Overprint

The advantage of Black Overprint is to enhance the quality of text and black images printed on colored backgrounds. By activating the Black Overprint feature (Default OFF), black text and graphics are drawn last over the solid color, blend, or image, preventing unpleasant results such as blurred text or haloing due to the slight shifting of text position.



Color Control, Simulation & Profiles

The purpose of **color simulation and color profiles** is to control how well Device A replicates how Device B would reproduce the same image using a different printing technology (i.e. offset), or on a different printer (i.e. Hewlett Packard). The Savin CLP37DN/CLP42DN uses a series of tables called color rendering dictionaries (CRDs) within its various drivers that contain preset values for how different devices produce particular colors. In this way, the printers can be “tuned” to deliver output that simulates how an image will print in its final reproduction on a particular device. The Savin CLP37DN/CLP42DN supports several types of color profile and matching options:



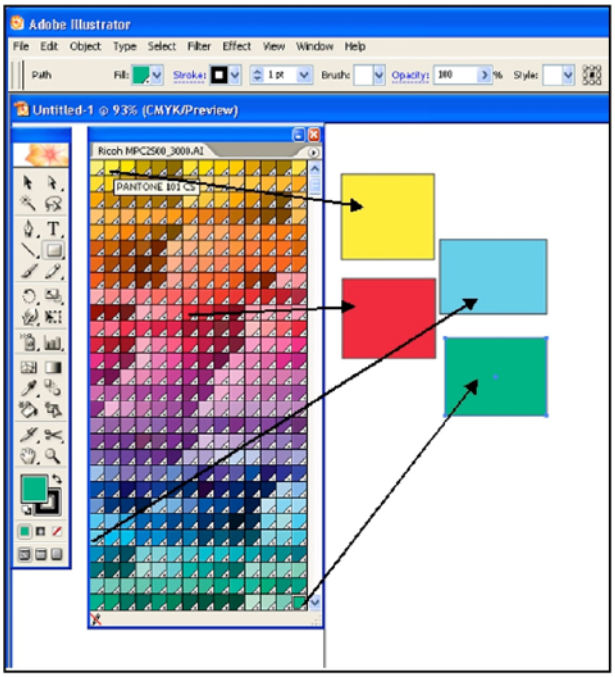
- **Auto**: Allows the printer to select the best color profile depending upon the content and appearance of the document.
- **Photographic**: Use this setting when the document contains photos and images with midtones.
- **Presentation**: This CRD is best for printing colored charts and graphs and documents with large areas of solid colors and text.

- **Solid Color**: Pick this CRD to match a specific logo or package color.
- **User Setting**: Allows users to print to a color profile that was downloaded from the authoring software application by the user.
- **CLP Simulation 1**: Increases the brightness and vividness of blue colors in a document.
- **CLP Simulation 2**: Increases the brightness and vividness of blue colors in a document, but results are lighter than those from CLP Simulation 1.

Another type of color simulation is the **CMYK Simulation Profile**. This profile is selected under Feature Set 3 of the printer driver and simulates the color tones achieved when using ink to print. Users can select from:

- **US Offset Print CMYK Simulation Profile:** Provides a color profile that closely reproduces colors produced using ink-based commercial offset printing technology in North America. Although it simulates the SWOP (Simulation for Web Offset Printing) standard, it must be noted this feature is not genuine SWOP and is not officially supported by SWOP.
- **Euroscale CMYK Simulation Profile:** Euroscale is the industry standard for CMYK reproduction using inks in Europe. This color profile closely reproduces colors produced using ink-based commercial offset printing technology in Europe.
- **JapanColor CMYK Simulation Profile:** Closely reproduces colors produced using ink-based commercial offset printing technology in Japan.
- **PaletteColor CMYK Simulation Profile:** This profile simulates the color reproduction of the PANTONE standard. Many of the colors are custom mixtures that are printed separately from the process colors (CMYK). It is impossible for any one printer to match the entire PANTONE spectrum. However, the Savin CLP37DN/CLP42DN can replicate a portion of the PANTONE palette using this profile.

PANTONE Support



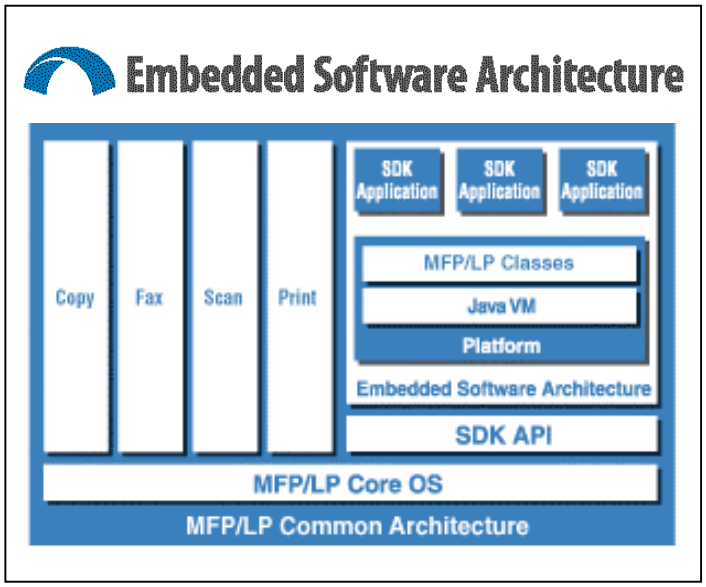
This profile replicates the PANTONE Matching System, the reference standard for defining custom colors in graphic arts, textiles, and numerous creative color industries. PANTONE is used in graphic applications such as Adobe Illustrator, Photoshop, and InDesign, as well as QuarkXPress, Macromedia Freehand, and several versions of CorelDRAW and Designer. Its applications include the precise reproduction of custom colors for company logos, skin tones, and packaging. Many of the colors are custom mixtures that are printed separately from the process colors (CMYK). There are more than 3,000 PANTONE colors, and while it is impossible for a CMYK printer to reproduce them all, the Savin CLP37DN/CLP42DN can reproduce a subset of 1,089 PANTONE-defined colors in this mode. It is this support that helps Savin position these printers as graphics-quality devices.

Please note this function is not available through the printer drivers. PANTONE has created a special release package for Savin that is available for download from the Savin website. These color palettes are used for creating new documents and files within specific applications such as those mentioned above. In order for a user to get the closest possible match to a PANTONE color from a Savin device the user must download these color palettes into the application, and then select colors from these imported palettes to create their design.

The main difference between the PaletteColor CMYK Simulation Profile and PANTONE Support is that PaletteColor CMYK Simulation Profile is used when the file has already been created on another device, allowing users to get the closest match to the PANTONE colors using their Savin printer. Savin Color Profile for PANTONE Support is used when creating a brand new file. In this case the user is best importing the PANTONE palettes into their application prior to building a new original document, and selecting colors directly from the PANTONE profiles.

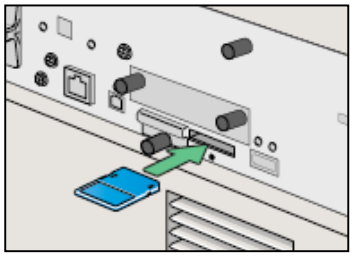
PANTONE certification for the Savin CLP37DN/CLP42DN is expected December 2010.

Device Customization



Savin understands that every business is unique. To meet your customers' specific workflow requirements, the Savin CLP37DN/CLP42DN supports **Savin's Embedded Software Architecture™ (ESA)**. This innovative Java-compatible software development platform permits for the design and implementation of customized applications to be embedded inside Savin multifunction systems and laser printers.

The Software Development Kit (SDK) for the ESA is a package of code-writing and application development-compiling-testing-debugging tools and manuals. Together, they allow Savin and customer solution partners (ISVs, SIs, VARs, etc.) to create and embed unique applications that run inside the printer to meet specialized workflow needs of businesses. These may include forms printing, unique fonts, barcodes, retail transaction/receipt printing, automated document routing, or report printing applications.



After an application has been created and tested, the code is installed in the device via the lower SD Card slot on the rear controller panel. Additionally, the code can be directly transferred to the printer and stored in the system's HDD if so configured, leaving an SD Card slot available for other optional functionality.

Note: *Additional memory option of at least 256 MB RAM is required for the use of SDK applications in the CLP37DN.*

Savin's Embedded Software Architecture will help to establish long term, profitable relationships with your accounts by delivering solutions that seamlessly integrate with established (or new) workflows. Savin ESA levels the playing field against other customization solutions such as Canon's MEAP (Multifunctional Embedded Application Platform), Konica Minolta's Open API, and Sharp's OSA java development platform.

For more information on Savin's Embedded Software Architecture™ platform, please visit www.savin.com.

Security: Device Access & Data Protection

Device access and data security have moved to the top of the list of customer concerns and purchase criteria. Employees can scan and send data to any network address; hackers present a constant threat to corporate networks; wireless connectivity can easily allow the interception of unprotected data streams, leaving companies vulnerable to information theft, security breaches, or falsification. Toward that end, the next-generation Savin Controller Architecture offers a number of standard and optional features to limit device access, track usage, and protect confidential information stored in memory in addition to the Locked Print mode reviewed earlier.

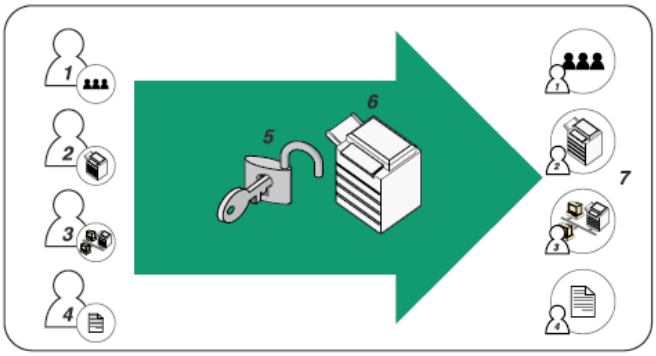
Please note that any security-related capabilities requiring the 80 GB Hard Disk Drive are part of the standard feature set of the Savin CLP42DN, and can be accessed on the Savin CLP37DN when that model is configured with the 80 GB HDD option.

Further, these features are separate from the Enhanced Locked Print-NX (ELP-NX) function, which requires software installed on a VM Card. ELP-NX is standard only for the Savin CLP42DN and cannot be added to the Savin CLP37DN in any configuration.

The following is a brief review of the security features provided by the Savin CLP37DN and Savin CLP42DN Color Laser Printers.

Please refer to the Savin Common Features Guide: Security Solutions for a detailed review of the device access and data protection capabilities supported by these devices.

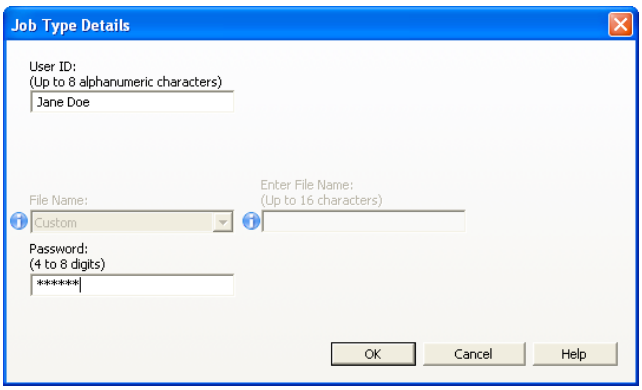
Authentication, Tracking, & Device Access Features



- **Administrator Authentication:** The system offers five (5) levels of administrator authentication, each with an escalating degree of access privileges into system defaults and parameters: **Machine, Network, File, User,** and **Supervisor**. REQUIRES HDD

- **User Authentication:** The printer supports several types of end-user authentication:

  - **User Code Authentication:** Up to 500 User Codes can be registered for authentication. Users must enter a pre-assigned code up to 8 digits in the printer driver to gain access to the device. Codes may be assigned to individuals to allow/deny specific printer or feature use, or the same code may be used by more than one user to track system usage by client or department for accounting purposes, for example. STANDARD FEATURE



  - **Basic Authentication:** Uses information stored in the printer's Address Book to authenticate each user. Administrators must register users and specify the functions available to each user in the Address Book. REQUIRES HDD

  - **LDAP Authentication:** Validates end users against data stored on an external Lightweight Directory Access Protocol (LDAP) server used for E-mail communications. If a user's LDAP account cannot be found, that user cannot print to that device. REQUIRES HDD

  - **Windows Authentication:** Matches user names and passwords against those stored in other enterprise Windows directories for device access. Excellent for large enterprises and those with more advanced data security needs. REQUIRES HDD

- **Job Logs and Access Logs:** Printer job history is stored at the device, and may be viewed via Web Image Monitor or SmartDeviceMonitor to track and trace system usage by job and user. Access logs store information about user access history, stored files, and administrator and service procedures. STANDARD FEATURE

- **User Lockout Function:** When Basic Authentication mode is active, if an incorrect password is entered several times under the same user name authentication fails. The printer cannot be used until the lockout period elapses or an administrator releases the lockout. Administrators set the number of Attempts Before Lockout (1 – 10) and the Lockout Period (1 – 9,999 minutes). REQUIRES HDD

- **Auto Logout Function:** The printer automatically clears out the current user and becomes inactive if the control panel is not used for a specified period of time (between 60 – 999 seconds). STANDARD FEATURE

- **Device Access:** The printer also supports several features for enhanced network security. These settings may be made at the control panel, via Web Image Monitor, or the Remote Communication Gate by authenticated administrators:

  - **TCP/IP Access Control:** The printer will only accept print data from networked computers within a specified range of IP Addresses. For example [192.168.15.25] – [192.168.15.40]. Print jobs sent from client PCs outside this range will fail. STANDARD FEATURE

  - **Enabling/Disabling Protocols:** This function essentially allows users to turn off unused/idle network ports and protocols to prevent unauthorized access to the printer over the network. Examples of protocols managed include IPv4, IPv6, IPsec, FTP, SMTP, HTTP, SMB, NetWare, AppleTalk, IPP, and more. STANDARD FEATURE

  - **Specify Network Security Level:** Many functions in the printer security feature set have various strengths of capabilities. By setting the security threshold to Level 0, Level 1, or Level 2, the printer will adjust groups of features, protocols, and ports accordingly to provide the desired level of network security. STANDARD FEATURE

    - Level 0: Easy use of all printer features in environments where there are no data security needs.

    - Level 1: For moderate protection of important information when the printer is connected to a network.

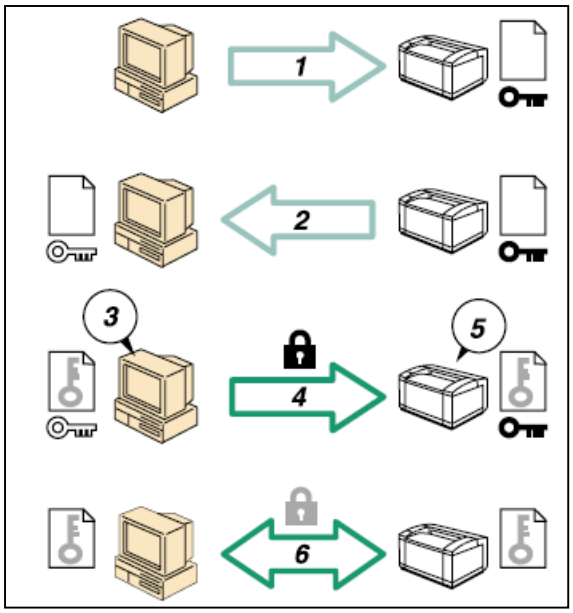
    - Level 2: For maximum protection against threats from outside the LAN.

- **Menu Protection:** This is a simple way to manage basic printer use when authentication modes are not required or enabled. Administrators can lock the printer's regular menu settings so end-users cannot change them. For example, forcing duplexing on every job, setting the display language, identifying media types in the paper trays, and fixing memory and network settings. STANDARD FEATURE

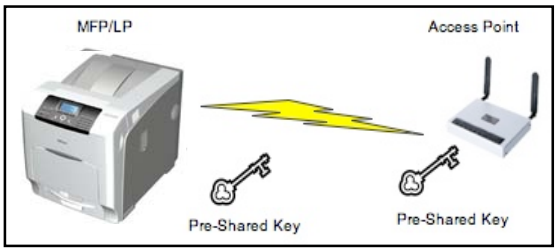
Data Protection & Encryption

In addition to the Locked Print Mode *(See Advanced Printing Features)*, the Savin CLP37DN/CLP42DN offers these data protection features:

- **Secure Socket Layer (SSL) and 128-bit Print Data Encryption via IPP support.** By scrambling print job data and passwords as they travel over the LAN, it becomes impossible for hackers to intercept, decipher, and tamper with them. A series of communications takes place between the sending PC and the printer so that passwords and file content can be encrypted prior to transmission over the network, and decrypted once they arrive at the device. This process requires an SSL Certificate, which is a digital "key" that must first be installed on both the device and the sending PC via Web Image Monitor or SmartDeviceMonitor. Think of it as an electronic credit card that contains user data and verifies the user's right to send and output encrypted data in readable form. The Savin CLP37DN/CLP42DN employs 128-bit strength encryption to protect data. This function is accessed through Web Image Monitor and can be activated when data is to be sent via the hardwired Ethernet interface, or the IEEE 802.11a/g Wireless LAN interface. STANDARD FEATURE



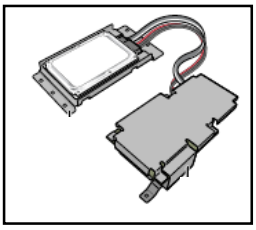
- **Wi-Fi Protect Access Support (WPA/WPA2):** Used in conjunction with the IEEE 802.11a/g Wireless LAN option, WPA/WPA2 is a security specification that addresses vulnerabilities in wireless encrypted communications. It provides a high level of assurance to enterprises, small businesses, and home-based users that data will remain protected by allowing only authorized users to access their networks.
  REQUIRES IEEE 802.11a/g OPTION + HDD



  There are two classes of WPA support:

  - **Personal** (802.11 original WEP) authentication and encryption features block intruders with wirelessly enabled laptops from tapping into wireless networks. The use of a pre-shared key eliminates the need for an authentication server and certificate process, making this mode suitable for small office environments without the resources to install such technology.
  - **WPA2** is a new Enterprise mode that is a subset of the IEEE 802.11i specification that enables 802.1X Authentication in large corporate environments where authentication and certificate authority servers are in use.

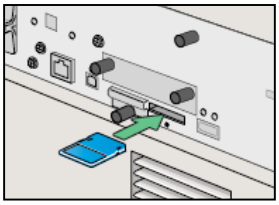
Protecting Data on the Hard Disk Drive



Data stored on the 80 GB HDD, standard on the Savin CLP42DN and optional on the CLP37DN, can be protected with these features and options:

- **Address Book Permission:** Administrators can specify which users may be allowed to access and modify data stored in the Address Book.
- **Address Book Encryption:** Administrators can encrypt data stored in the Address Book to prevent data from being read by unregistered users and the theft of user data.
- **Hard Disk Data Encryption:** The **HDD Encryption Unit Type D** is an option that scrambles data stored in the device's NVRAM (data that remains in memory even after the power is turned off) and on the Hard Disk Drive. This function protects print job data and other information stored on the hard disk by scrambling the bits, making them unreadable to anyone who may try to intercept and decipher data stored on the HDD.
- **Deleting Data on the Hard Disk:** The **DataOverwriteSecurity Unit Type K (DOSS)** is an option that destroys temporary data stored on the 80 GB HDD by writing over it using one of two overwrite timing settings: **Auto Erase Memory** (Event driven – after each job is completed) or **Erase All Memory** (Batch – deleting all contents including any Address Book information, user codes, additional fonts downloaded to the system for when the system is to be returned, disposed, or redeployed). Data is erased using one of three government approved overwrite methods: **NSA Standard**, **DoD Standard**, or **Random Data Overwrite**. DOSS makes it incredibly difficult for anyone to reconstruct images or files previously written to the HDD. Initially designed to meet government, military, and global account requirements for classified document security, you can use DOSS to add value to customers with all types of mission-critical documents that require protection from leaks and unauthorized distribution.

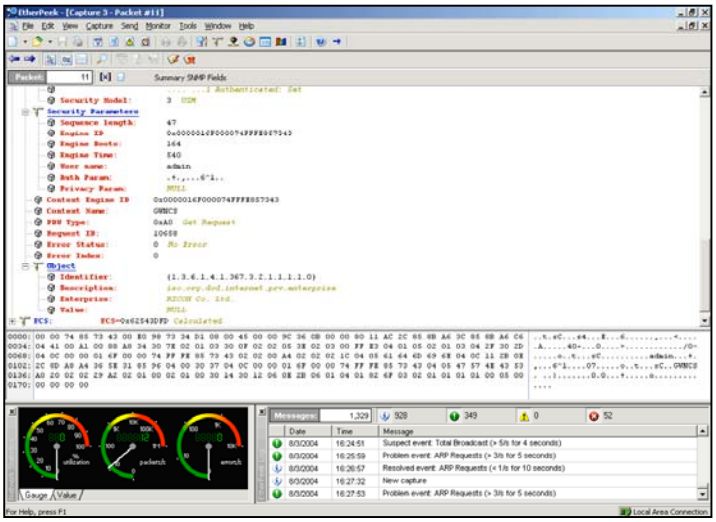
The HDD Encryption and DOSS options are easily installed using an SD Card, as pictured here.



Ensuring Safe Network Communications

These modes help keep user data, passwords, and print jobs safe when communicating with the printer over the network:

- **SNMPv3 Encryption:** SNMPv3 is a network management tool that provides a method of managing networked peripherals such as printers, scanners, workstations, and file servers by grouping them together into a "community". SNMPv3 Encryption allows administrators to safely make changes to device settings in each community via SmartDeviceMonitor from a networked PC using encrypted communications to maintain a secure environment. STANDARD FEATURE



- **Internet Protocol Security (IPsec) Communication:** Encrypts each IP packet in a data stream, and also establishes mutual authentication to protect data flows. There are multiple protocols inside the IPsec suite that provide data integrity and protection for transmission of data over the Internet. Support for this standard will allow you to present the Savin CLP37DN/CLP42DN as a viable solution for government, classified, and military organizations with high-level security needs. STANDARD FEATURE

- **Password Protection:** The Driver Encryption Key and IPP Authentication features encrypt login and IPP passwords from being intercepted during transmission over the network. STANDARD FEATURE

Enhanced Security Features for Ultra-Secure Environments

For environments with intense data security, compliance issues, and/or user access requirements, the Savin CLP42DN is equipped with the necessary hardware and software options to enable **Enhanced Locked Print (ELP-NX)** as a standard function.

See Savin CLP42DN Product Positioning for a description of the ELP-NX workflow.

Standard Locked Print versus Enhanced Locked Print-NX:

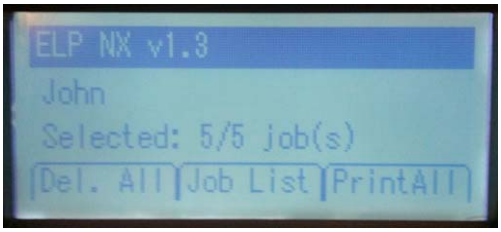
Using the Locked Print feature allows a user to print a job and assign a password to the document. Upon arrival at the printer, the user scrolls though all locked print jobs to locate and release their specific job with the password. Print data is not encrypted.

Enhanced Locked Print-NX provides these added benefits:

- Upon arriving at the printer and inputting a password, the **user will only see print jobs corresponding to their ID**. This is more secure than allowing users to see all locked print jobs.

- All jobs stored on the HDD of the printer are **automatically encrypted** for maximum protection.

- When the account's network is configured with the optional FlexRelease Server, users can **securely forward print jobs from any computer to another ELP-NX enabled device** for printing elsewhere on the network for a more flexible printing environment.



- **Optional Card Authentication Package (CAP)**. Whereas earlier versions of the ELP function required the use of a card reader, ELP-NX makes this an option. Users can now enter passwords using the 12-key alphanumeric keypad. Of course, the CAP option is still available for use with the Savin CLP42DN for environments already using magnetic stripe cards for building or room access.

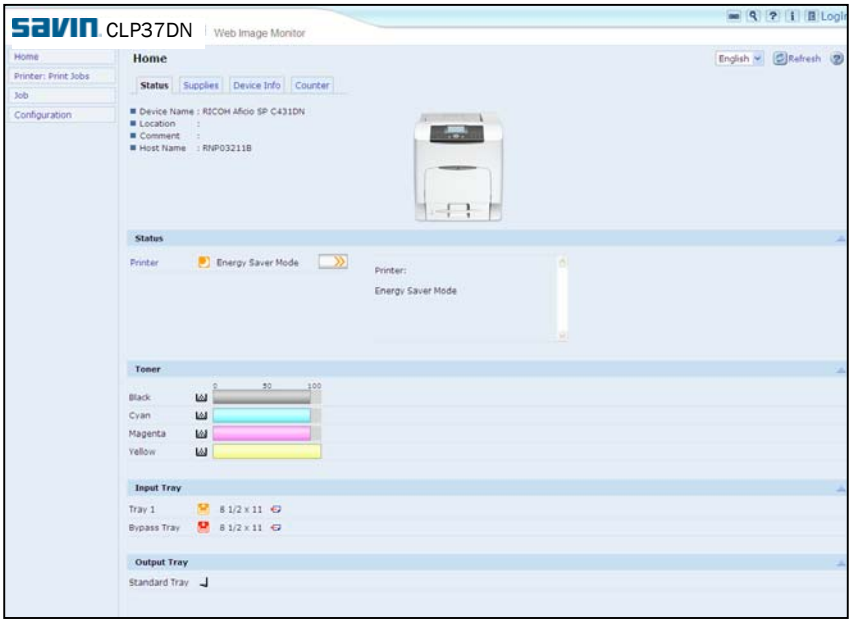
BUNDLED SOFTWARE UTILITIES

Savin's suite of bundled document and device management solutions is reviewed here because your marketing efforts must include more than hardware to be successful – you need to present a total solution. This section provides a basic overview of several bundled and optional software utilities. For detailed information and specifications regarding these and other optional solutions for use with the Savin CLP37DN/CLP42DN, please refer to the appropriate Savin Document Solution Product Launch Package, or to the Savin Common Features Guide: Software Solutions.

Integrating printers and MFPs with an existing IT infrastructure requires a lot more than an Ethernet interface. Savin provides a comprehensive set of administrative and integration software tools to assist administrators and end-users in the installation, configuration, and maintenance of the device. These utilities also add value to your solution by enabling you to deliver streamlined workflow and document management solutions in addition to administrative tasks. The following utilities ship standard with the Savin CLP37DN/CLP42DN:

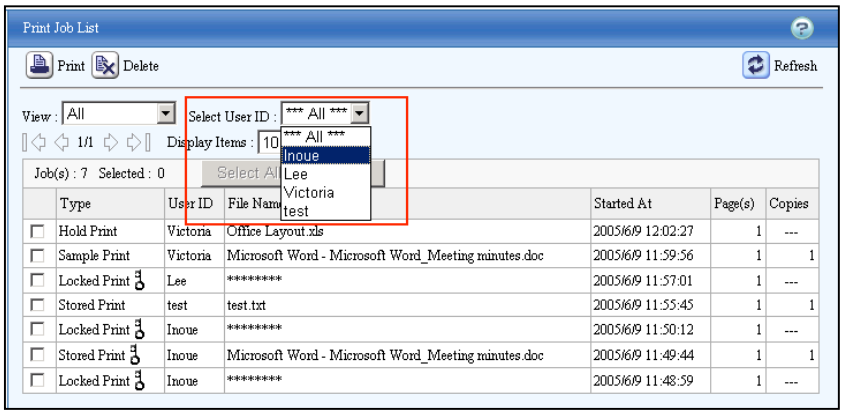
Web Image Monitor (Standard)

Web Image Monitor is firmware built into the controller of every Savin printer that enables all device settings to be managed via a normal web browser (Internet Explorer, Safari, Firefox) simply by inputting the machine's IP address as the URL.



There are two modes: **Guest/User Mode** allows end users to see printer status, check the configuration of the target printer, and view the job history and error log. Printer settings cannot be changed.

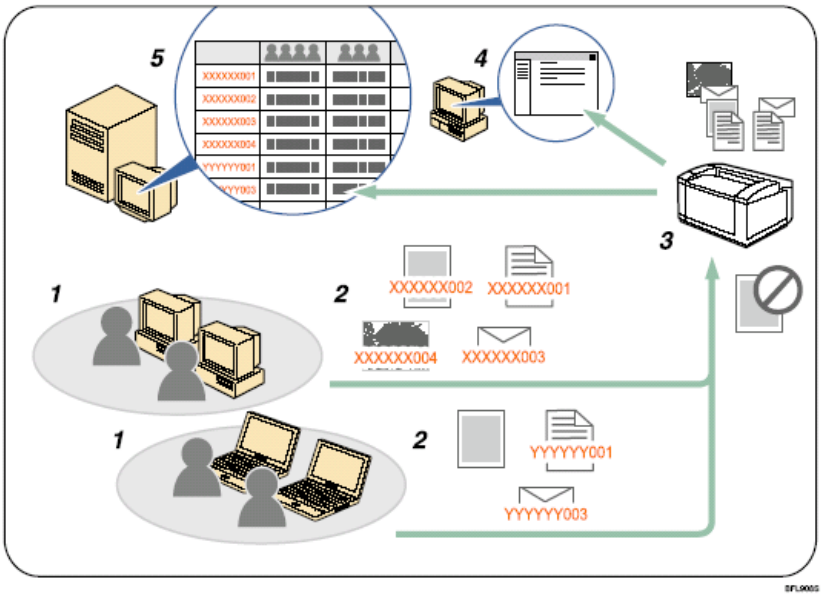
The **Administrator Mode** enables those with greater network authority to configure printer and network/security settings, manage/delete passwords and print jobs, as well as monitor/modify system conditions including paper and toner supply levels, set paper tray parameters, manage job queues, counter information, and more.


Print Job List
Print
Delete
Refresh
View : All
Select User ID : *** All ***
Display Items : 10
*** All ***
Inoue
Lee
Victoria
test
Job(s) : 7 Selected : 0
Select All
Type
User ID
File Name
Started At
Page(s)
Copies
Hold Print Victoria Office Layout.xls 2005/6/9 12:02:27 1 ---
Sample Print Victoria Microsoft Word - Microsoft Word_Meeting minutes.doc 2005/6/9 11:59:56 1 1
Locked Print Lee ******** 2005/6/9 11:57:01 1 ---
Stored Print test test.txt 2005/6/9 11:55:45 1 1
Locked Print Inoue ******** 2005/6/9 11:50:12 1 ---
Stored Print Inoue Microsoft Word - Microsoft Word_Meeting minutes.doc 2005/6/9 11:49:44 1 1
Locked Print Inoue ******** 2005/6/9 11:48:59 1 ---

The Web Image Monitor utility is used to manage the Address Book as well as to install printer certificates for encrypted communications. It is through Web Image Monitor that administrators select the E-mail Alert feature through which registered users are notified via E-mail in the event of a fault condition such as Low Toner, No Toner, Service Call, or Off-line. The Remote Operation Panel function allows for greater administrator productivity by providing the ability to reset the current job or reboot the printer from anywhere on the network in the event an end-user cannot resolve the problem directly.

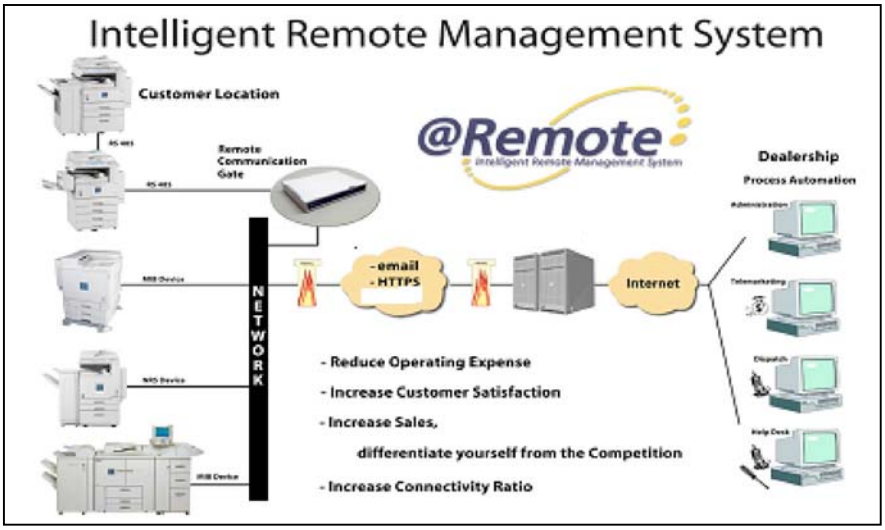
Web Image Monitor enhancement: Classification Code feature

Cost control is a growing area of concern for companies, especially those with large populations of employees and printers. Some companies analyze usage data to determine proper deployment strategies, or when an upgrade is necessary at a particular location given volumes or applications. Others require this information for client charge-back purposes or internal expense allocation by division, department, or project teams. To meet these evolving requirements, the Savin CLP37DN/CLP42DN supports a Classification Code feature inside Web Image Monitor that allows users to set up accounts and sub-classes for individual users or specific document purposes – much deeper than analyzing output by size or type. Now printing costs can be appropriately allocated to designated departments, projects, or users down to a more granular level of detail.



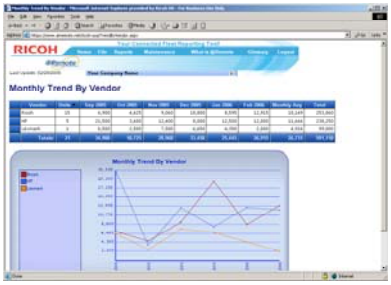
@Remote (Standard capability, dormant upon shipment)

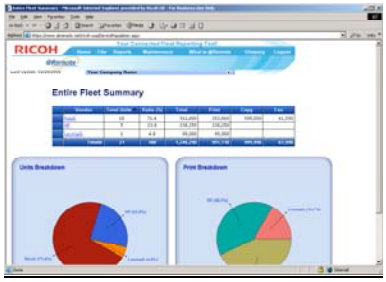
This is Savin's remote service system that allows the monitoring, managing, automated meter reading, and servicing of all intelligent devices (MFPs/Laser printers) deployed across remote customer networks. Its key benefits, fleet reporting, and Auto Toner Replenishment and Service Call Handling is a tool to increase customer satisfaction by providing proactive service, reducing downtime, and lowering running costs.



There are two ways to implement the @Remote system. The **embedded version** includes software and firmware built into the latest Savin Controller Architecture versions (@Remote is dormant upon shipment and must be activated by a service technician post-install upon customer request). This version can monitor and report on itself and is best for small accounts with 1 – 4 machines.

An **external appliance** provides the ability to monitor and manage up to 500 machines on the customer's network, delivering fleet management and cost containment tools to enterprises with large populations of machines and users. @Remote is the realization of a technology that customers have long requested for the automation of meter reading, accurate and timely billing, fleet reporting, and more.





Need more support? Check out these resources:

- @Remote Support Website - http://tscweb.net/atremote
- @Remote Knowledgebase - http://tscweb.net/atremote/faq.asp
- @Remote Support Hotline - 888-424-1573
- @Remote Questions can be submitted to http://tscweb.custhelp.com/cgi-bin/tscweb.cfg/php/enduser/ask.php

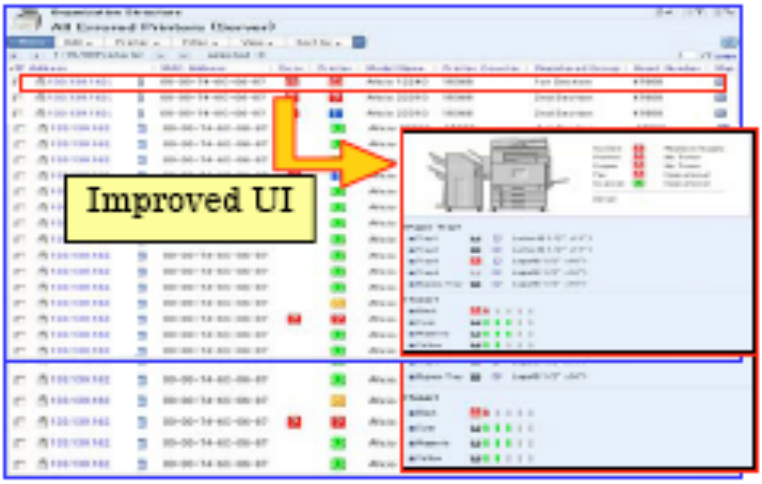
In addition to these bundled utilities, Savin offers a wide range of software applications that address customers' high volume document storage needs, variable data printing, and even host printing requirements. ***Please refer to the Savin Common Features Guide: Software Solutions for more details.***

Optional Utilities

Note: Web SmartDeviceMonitor and DeskTopBinder Lite are no longer bundled as standard utilities, but can be purchased and downloaded for use with the Savin CLP37DN/CLP42DN.

Web SmartDeviceMonitor Version 2/ SmartDeviceMonitor for Admin (Optional)

While Web Image Monitor remotely manages a single device, Web SmartDeviceMonitor utility and its Windows-based companion SmartDeviceMonitor for Admin can oversee fleets of multiple devices installed on the network.



- **Web SmartDeviceMonitor:** For larger environments using the Web to manage peripherals. The software is installed on a Windows server.
- **SmartDeviceMonitor for Admin:** Designed for smaller offices, the software is installed on the Administrator's PC and uses Windows to control printer communications.

WSDM allows administrators the ability to change printer and driver default settings and distribute those changes to all devices electronically organized into groups. Users can see detailed information regarding attached options, change device names or IP addresses as necessary, and monitor printer usage.

Web SmartDeviceMonitor is a scalable enterprise-class solution that should be recommended to users with a mix of devices installed on several floors, buildings, or even different cities. WSDM helps to control document production costs by forcing individual users to comply with printing rules such as duplexing or restricting access to color output. WSDM can also provide information about other vendors' devices so that IT managers can use a single utility to monitor all printing devices on the network. The user interface is designed for at-a-glance system monitoring with green (OK), yellow (Requires attention), and red (fault has occurred) indicators denoting status conditions.

The "lite" version intended for end-users, previously known as SmartDeviceMonitor for Client, has been merged with the functionality found in the latest version of Savin's DeskTopBinder software.

SAVIN CLP37DN/CLP42DN SYSTEM SPECIFICATIONS

Main Unit Specifications

Savin CLP37DN	Part # 406656	
Savin CLP42DN	Part # 406660 – Ships with 80 GB HDD, 768 MB RAM and VM Card for ELP-NX (Enhanced Locked Print) as a standard function.	
Configuration:	Desktop	
Technology:	Laser beam scanning & electrophotographic printing	
	4 drum tandem method	
Resolution:	1200 x 1200 dpi (1 bit)	
	600 x 600 dpi (1 bit)	
	600 x 600 dpi (2 bit) Default	
Print Speed (LTR):	CLP37DN:	37-ppm Full-color & Monochrome
	CLP42DN:	42-ppm Full-color & Monochrome
First Print Speed:	Full-color:	15 seconds
	Monochrome:	10 seconds
Warm-up Time:	50 seconds or less	
Standard Paper Supply:	550-Sheet Tray + 100-Sheet Bypass Tray	
Optional Paper Supply:	550-Sheet Paper Feed Unit (Up to 3 may be installed)	
Maximum Paper Capacity:	2,300 sheets	
Automatic Duplexing:	Standard	
	Duplex output speeds run nearly 100% of the rated simplex speed for each paper size.	
Output Capacity:	500 sheets, face down	
Paper Sizes		
Std. & Optional Trays:	Letter (8.5" x 11"), Legal (8.5" x 14"), Executive (10.5" x 7.25"), Half Letter (5.5" x 8.5"), A4 (210 x 297 mm), A5 (148 x 210 mm), A6 (105 x 148 mm), B5 (148 x 257 mm), B6 (128 x 182 mm), F (8" x 13"), Foolscap (8.5" x 13"), Folio (8.25" x 13"), Envelopes: Com10/Monarch/C6/C5/DL	
	Custom Size Range:	
	Width: 3.86" – 8.5" (98 – 216 mm)	
	Length: 5.83" – 14" (148 – 356 mm)	

Bypass Tray:	Letter (8.5" x 11"), Legal (8.5" x 14"), Executive (10.5" x 7.25"), Half Letter (5.5" x 8.5"), A4 (210 x 297 mm), A5 (148 x 210 mm), A6 (105 x 148 mm), B5 (148 x 257 mm), B6 (128 x 182 mm), F (8" x 13"), Foolscap (8.5" x 13"), Folio (8.25" x 13"), Envelopes: Com10/Monarch/C6/C5/DL Custom Size Range: Width: 2.76" – 8.5" (70 – 216 mm) Length: 5.0" – 49.6" (127 – 1260 mm)
Paper Weights	
Std. & Optional Trays:	14 - 59 lb. Bond/120 lb. Index (52 - 220 g/m^2)
Bypass Tray:	14 - 69 lb. Bond/140 lb. Index (52 - 256 g/m^2)
When Duplexing:	16 - 44 lb. Bond/90 lb. Index (60 - 163 g/m^2)
Paper Types	
(All sources):	Plain Paper, Recycled Paper, Middle Thick Paper, Thick Paper, Thin Paper, Transparency, Letterhead, Labels, Coated Paper (Glossy/Semi-Gloss/Matte), Waterproof, Preprinted, & Envelopes ***Note:*** *Support for specialty media like Aqua Ace Waterproof media and static cling paper are available. Please check with your local dealer for availability.*
Dimensions (WxDxH):	17.48" x 25.91" x 19.29" (444 x 658 x 490 mm)
Weight:	126 lb. (57 kg) Includes standard paper tray and PCU
Power Requirements:	120 - 127V, 60Hz
Power Consumption:	Maximum: 1520W or less Operating: CLP37DN: 825W or less CLP42DN: 894W or less Energy Saver: 110W Sleep: 6W
Safety Regulations:	UL60951-1, CAN/CSA C22.2 No.60950-1 (c-UL)
EMI:	FCC Part15 Subpart B, IC ES-003
Environmental Standard:	ENERGY STAR Color Printers-Tier 2, ECP

Print Controller Specifications

CPU:	600 MHz	
Memory:	CLP37DN:	384 MB RAM standard
		768 MB RAM maximum
	CLP42DN:	768 MB RAM standard
		768 MB RAM maximum
Hard Disk Drive:	CLP37DN:	80 GB (optional)
	CLP42DN:	80 GB (standard)
Standard Interfaces:	10/100Base-TX Ethernet, USB 2.0 Type A, USB 2.0 Type B	
Optional Interfaces:	IEEE 802.11a/g Wireless LAN, Gigabit Ethernet,	
	IEEE 1284/ECP Parallel	
Fonts:	PCL:	45 fonts + 13 International fonts
	PostScript 3:	136 fonts
Printer Languages/Drivers:	PCL 5c, PCL 6,	
	Adobe PostScript 3 + PDF Direct Print	
Network Protocols:	TCP/IP (IPv4, IPv6), AppleTalk, IPX/SPX	
Supported Environments:	Windows 2000, XP, Vista, 7,	
	Server 2003 & 2003R2, Server 2008	
	Mac OS 8.6 – 9.x, OS X v.10.2+	
	Novell NetWare v 6.5+, SAP R/3	
	Citrix Presentation Server	
	UNIX (Savin Filter Phase 11)	

Security Capabilities:	Enhanced Locked Print-NX (CLP42DN only)
Security features may require	Administrator Authentication (5 levels)
80 GB Hard Disk Drive	User Authentication (5 types)
(standard on CLP42DN,	SNMP v3, IPsec
optional on CLP37DN)	128-bit SSL Print Job Data Encryption
and/or other optional equipment.	500 User Codes
	User Lockout/Auto Logout
	Locked Print
	DataOverwriteSecurity System (DOSS)
	HDD Data Encryption
	Address Book & Password Encryption
	WPA (Wi-Fi Protect Access)

Controller Options

256 MB RAM DIMM (Type G)	Part # 414046
512 MB RAM DIMM (Type I)	Part # 414635 (Std. on CLP42DN)
80 GB Hard Disk Drive (Type 5000)	Part # 413889 (Std. on CLP42DN)
VM Card (Type O)	Part # 406678 (Std. on CLP42DN)
IEEE 802.11a/g Wireless LAN (Type L)	Part # 403000
Gigabit Ethernet (Type A)	Part # 402547
IEEE 1284/ECP Parallel (Type A)	Part # 411699
Camera Direct Print Card (Type H)	Part # 406676
HDD Data Overwrite Security (Type K)	Part # 402998
HDD Encryption Unit (Type D)	Part # 403113
SD Card for Netware Printing (Type D)	Part # 406688

Hardware Accessories

Paper Feed Unit (PB1020)	Part # 406681
Tip-resistant Caster Table (Type C)	Part # 406755

Consumables & Yields

Black Toner Bottle CLP37A	24,000 pages*	Part # 821078
Yellow Toner Bottle CLP37A	21,000 pages*	Part # 821079
Magenta Toner Bottle CLP37A	21,000 pages*	Part # 821080
Cyan Toner Bottle CLP37A	21,000 pages*	Part # 821081
Black Photoconductor Unit SP C430	50,000 pages**	Part # 406662
Color Photoconductor Unit SP C430	50,000 pages**	Part # 406663
Intermediate Transfer Unit SP C430	100,000 pages**	Part # 406664
Waste Toner Bottle SP C430	50,000 pages**	Part # 406665
Maintenance Kit/Fusing Unit SP C430	120,000 pages**	Part # 406666

**Declared toner yield values in accordance with ISO/IEC 19798. Actual yields may vary based on types of images printed and other factors.*

***Declared imaging component yields based on 5% coverage, 3 pages/job and a 50% color ratio. Actual yields may vary based on images printed and other factors.*

The Savin CLP37DN/CLP42DN ships with starter toner bottles yielding 3,000 pages @ 5% image coverage for each color. All other consumables ship at full yield.

For maximum performance and yield, we recommend using genuine Savin parts and supplies.

savin

www.savin.com

Bringing Savin Value to Your Organization
Savin technology offers a diverse portfolio of solutions to help your organization stay competitive and move ahead. Let Savin show you how to empower your business to improve critical processes, keep information secure, ensure compliance and promote environmental sustainability while reducing the total cost of ownership.

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